

EXECUTIVE SUMMARY

DESIGNING TOMORROW'S COMMUNICATIONS PRODUCTS AND SERVICES

New post-graduate research and teaching institute in Ivrea

The Interaction Design Institute Ivrea is a new postgraduate centre for teaching and research in interaction design, based in Ivrea, Italy. Its focus is on designing new ways for people to interact with each other through information and communications technology. The Institute brings together design, culture, technology and business.

The Institute is a non-profit association, supported by private companies. Its founder sponsors are Telecom Italia and Olivetti who have underwritten the first five years of operation and provided the Institute's building, student residence and infrastructure. Its first academic year began in October 2001.

The Institute provides a two-year postgraduate programme of study for students from a range of different backgrounds, including art and design, computer science and electronics, and the human sciences. Almost all have work experience as well as a degree and they come from all over the world. The two-year postgraduate course is multi-disciplinary. It includes a first year taught curriculum; year two is based mainly on projects. The emphasis is on learning by doing. Leading practitioners come to lecture and run workshops. Interaction between students, researchers and faculty is continuous. Teaching is in English. The staff come from similarly different backgrounds, and have worked in leading industrial positions and in universities.

A collaborative design research studio runs alongside this postgraduate programme. The research projects, supported by private companies, governments and the European Union, address three broad themes: "personal technologies", which includes wearables and fashion, as well as furniture and the home, "connected communities", which addresses the question how to design products and services that support people in their need and desire to share knowledge and communicate feelings, and finally "beyond the product", focused on services and systems for a networked society.

The Institute has recently also developed interaction design projects for Trenitalia and the EU-funded project "Designing for Future Needs". This year, two of our research projects have been accepted for presentation at SIGCHI workshops.

Interaction Ivrea is supported by a team of international experts. A Steering Committee, consisting of Barbara Ghella, John Thackara, Bill Verplank, and Marco Zanini, provides guidance to the management of the Institute. The academic and research activities are further developed with the input of a scientific committee, the Explorers' Club, with international key players in the field of interaction design.

www.interaction-ivrea.it

WHAT IS INTERACTION DESIGN?

INTERACTION DESIGN is a new discipline: a fusion of aesthetics and culture, technology and the human sciences. It concerns the design both of the services these technologies might offer, and the quality of our experience of interacting with them.

Human life is an interactive life. From birth we interact directly with people and with our environment, using our senses, our imagination, our emotions, our knowledge.

But today, computers and telecommunications allow people to interact indirectly. Interactive technologies have become a medium through which we interact with each other and with our environment; and they are transforming every aspect of our lives.

Just as industrial design shapes our interaction with machines, or architecture shapes the quality of our social life in cities and towns, interaction design shapes the life we live with interactive technology. And, like architecture and industrial design, this concerns culture and technology.

Interaction design also reveals the new business models that are needed to deliver these services and experiences.

The world is already filled with 12 computer chips for every man, woman and child; by the time a child who is now in kindergarten leaves school, there will be thousands of chips for every human being alive. In a world of such complexity, the quality of interaction with these technologies will define the value of the life she lives. In a world of such complexity, good interaction design will make digital technologies easily accessible to all - whatever their age, whatever their education.

Interaction design will shape the development of information and communication technologies - one of today's key economic and social challenges.

The **social challenge** is the danger of the digital divide: that these technologies extend the capacity of professional knowledge workers, leaving even further behind those without access to knowledge and education. Good interaction design makes digital technology easy to use and accessible to all.

The **economic opportunity** is to integrate culture and design. We live in a world where immaterial value is becoming increasingly important (in fashion, advertising, entertainment) and where production in an increasingly globalised market will go to places where labour costs are low. Our economic future will depend on a new capacity to conceive, develop and produce goods and services with a high communication and cultural value.



To make successful products or services today, good technology is not enough. They need to fit simply, gracefully, and enjoyable into the fabric of everyday life and culture. They need to be *desirable* as well as useful, *accessible* as well as powerful. This is the role of interaction design.

To address these challenges, we need to develop sophisticated strategies of cultural research and development; to redefine and merge the scientific and humanistic knowledge that defines industrial culture today; to construct new areas of knowledge and expertise; and to educate people to be flexible and inventive so that they can seize the opportunities these new technologies offer for cultural, social and economic life. This is the role of Interaction Ivrea.

THE ACTIVITIES

Interaction Design Institute Ivrea focuses on the ways people interact with communications and computers. We aim to develop deep technical and cultural knowledge, as well as fostering managerial skills and entrepreneurship in the field of communications services. Our products will be **people**—innovators capable of developing new concepts, new skills, and new business models—and **ideas**—how to design products and services that are culturally desirable, technically feasible, and economically sustainable.

Interaction Ivrea is a new kind of institute combining research, practical design and business. Its product is the knowledge of the Interaction Design process and an understanding of its cultural and economic implications. Its process is a continuous interplay of theory and practical experiment through design projects.

Interaction Ivrea graduates will become experts in the design of communication products and services. They will understand the power of technology to shape everyday culture and explore the interplay of design and culture, economy and technology.

The Structure of the Activities

- **Diploma Course:** a two-year mid-career Masters programme in Interaction Design for participants from a broad range of disciplines and cultures.
- **Design Innovation Research Laboratory:** to create knowledge and test it through designs and prototypes made in collaboration with companies and institutions. Through alliances with industry, Interaction Ivrea explores the space where business and innovation meet.
- **Knowledge Sharing:** as its activities develop, the Institute will create a lively synergy between the worlds of study and production—through its web site, through professional seminars and conferences, and through its research collaborations with industry.

The Diploma Course

The Diploma Course is a two-year postgraduate programme. Graduate students from a wide range of backgrounds learn to design interactive products, services and experiences based on information and communications technology. All courses are held in English.

Learning is organised around projects through which graduate students will gain skills, knowledge and understanding to enable them to design interactive products well. They learn in Mark Rettig's words both to **design the Right Thing** (things that will enhance people's lives at work and at play) and to **design the Thing Right** (to design its form so it is satisfying and enjoyable to use).

The main activity of the course is designing and prototyping, working alone and in teams. The **first year** of the course is a structured programme of projects, exercises, workshops and lectures.

The first trimester offers students an overview of the basic components of interaction design. The three months are structured in course weeks during which students attend lectures and develop projects in small working groups. The second and third trimesters require more long-term project work from the students. The second term consists of two five week projects, the first one focused on designing desirable user experiences in our homes and in what we wear, the second one explores the space and boundaries certain new technological innovations can offer and ends with a study trip. During the third term students concentrate on interaction design solutions for systems with a bigger social and economic context.

The **second year** is based around a project chosen by the graduate students, within one of the Institute's research themes.

The programme is residential, and great importance is placed on teamwork and the creation of a reflective and creative community. Leading practitioners come to lecture and run workshops. Interaction between students, researchers and faculty is continuous.

First Academic Year 2001-2002

In the first year, students go through several projects addressing the issues of Interaction Design from various starting points.

First trimester: Basics of Interaction Design

The autumn term, focused on the basics of interaction design, kicked off with an **introductory week**, where the students got to know each other and presented their visions of interaction design.

This was followed by a **crash course**, which introduced this group with all its different backgrounds to the field of interaction design. Students were made aware of the importance of including the user and the environment in the design process and started immediately with a practical assignment: the design of a shopping experience. The design brief was to focus on how a palm-like shopping assistant could augment the shopping experience.

The **interaction + visual** week started off with lectures on philosophy, photographic composition, and visual physiology. Each student created a visual design that explored the basic elements of interaction and the connection between physical and virtual space. The aim of the lectures was to provide students with the conceptual tools to design an interactive experience.

The third week was devoted to **sound**. The lectures explored the physical and psycho-acoustical qualities of sound, the way sound influences the environment, and those characteristics of sound one has to take into account when designing an acoustic experience. Students learned to generate sounds in interaction processes, going beyond the simple effects that interfaces often produce. Instead they focused on sounds that convey ideas and do this in a graceful yet intriguing way.

During the **user focus week**, Jan-Christoph Zoels and visiting professors Joy Mountford (IDBias) and Mark Burrell (Director of User Experience, Sapient) introduced students to the main methods, processes and tools to create designs that are focused on a person and his/her needs: experience modelling, participatory design, and user experience assessment. During this week, students focused on how to observe and analyse user behaviour; create a series of user profiles; be involved in a conceptual design session of possible prototypes; decide on the appropriateness of various evaluation methods, and test the effectiveness of a new design. The project assignment was to study the use of the mobile phone in the office.

During **travel week** small groups of students travelled for two to four days to various parts of Italy. The trips were organised as learning experiences: students immersed

themselves in the real Italian society, rather than staying within the image that our country sells abroad, and focused on the production processes of the entrepreneurial reality of this country (from the arms industry to the night-club business along the coast of Emilia-Romagna), rather than on the products these industries create. The eight trips focused on car production around Torino (“Italy is a land of drivers”), industrial design around Milan (“Italy is a land of poets”), food industry in the Alba and Langhe regions (“Italy is a land of food”), entertainment industry in Rimini (“Italy is a land of fun”), political system in Rome (“Italy is a land of politics”), art industry (“Italy is a land of art”), immigration (“Italy is a land of immigrants”), and weapons industry (“Italy is a land of guns”).

It was now time to take a step back and the **reflection week** offered the students the possibility to reflect on the first part of the Course, to confront themselves, and to read up and write about those things they had learned during their first months in Ivrea.

The following two weeks were dedicated to **physical computing**. Our staff and Stanford University Professor Bill Verplank aimed to provide students with a series of basic concepts on the history, theory and practice of tangible user interfaces and ubiquitous computing. During the lectures, students learned the basics of electronics through BasicStamp programming, and approached conceptual and mental models for physical computing. The practical assignment required students to make a small interactive system for dimming lights.

The **environment week** focused on how design is determined by aesthetic and programmatic requirements. Students were asked to develop proposals to design the experience of moving through the Institute’s building, so that it functions itself as an interface, explains to visitors some of the meaning of interaction design, conveys what is going on inside, and even allows the visitors some form of feedback.

Director Gillian Crampton Smith and the Italian expert Franco Berardi ran the last week of the 2001 trimester devoted to **narrative**. The week’s starting point was simple: until now the process of convergence between the web and other media has been basic, yet the web has some basic features that make it unique: connectivity, immersion and interactivity. As TV has generated specific formats with its own characteristics, the web also needs to become an author and a voice, and develop its own discourse and narrative. With this in mind, students had afternoon workshops on how to develop a narrative in a connected environment. They worked on the creation of “net-fiction” and developed a scenario for its use on the internet.

Second trimester: “Designing Desire and Harnessing Technology”

The second trimester of the academic year 2001-2002 featured three key components: two five week projects – Designing Desire and Harnessing Technology – and a study visit to Japan.

The goal of the first project **Designing Desire** was to learn about the potential of interactive media in designing desirable user experiences in two contexts: one focusing on the private space of our homes, the other on when we go out in public, taking our technology with us in the form of wearable computing.

The project had one week of workshops and four of project work.

A preliminary weeklong conference brought together designers, technologists, anthropologists, economists and fashion experts in order to set the scene. Lectures and workshops surveyed the history and current context, providing insight into the fashion and consumer durables industries, and inspiring discussions about the technology required for the production of these artefacts. Visiting professors included Joanna Berzowska, Chief Creative Officer of a fashion technology company; Anthony Dunne and Fiona Raby, Senior Research Fellows in Computer Related Design at the Royal College of Art in London; Richard Eisermann, Design Director of Whirlpool Europe Studio; David Gessel, partner in PicoStar, a California based technology incubator; Francesco Morace, sociologist, writer and journalist; and Ted Polhemus, an American anthropologist, author, lecturer and photographer.

The student project work required students to design the interaction with products and services that were not only functional, but also aesthetically satisfying. They focused on prototypes that could be worn or used in the home.

The Interaction Ivrea website contains a full report of the conference and an overview of the student research projects.

Harnessing Technology was the next project, developed in collaboration with Stanford University Professor Bill Verplank. It explored the space and boundaries certain new technological innovations can offer.

Many interesting technologies never left the research labs because nobody saw adequate applications. One of the reasons for this is that designers, product developers, marketers and managers have problems understanding new technologies at the level necessary to see their potentials. The engineers on the other hand are rarely able to place their inventions in context, and often produce simplified and banal scenarios that at times are counter-productive. One way of overcoming this communication problem is for designers to learn to ask the right questions, to the right

people, in the right language. They also need to learn to identify the level of understanding of a new technology that is necessary for the purpose of being able to work with it in a creative manner.

The project combined a scientific search for a new technology's basic elements and rules of composition, and an artistic exploration of its potential for use, through a case studies and theory input (e.g. patents, scientific papers, experiments, connecting to engineers and suppliers).

Three technologies were explored in depth: streaming video on handheld devices, contact and contact-less ID tags, and interactive haptics (tactile tools that work through force feedback). A series of workshops helped students to get close to these technologies, to understand their characteristics and constraints, and to pick one that they will concentrate on for an in-depth analysis of its future potential.

The two projects were followed by a **study trip to Japan**. And of course, students attended the Italian courses that started during their first trimester in Ivrea.

Third trimester: “Beyond the Product”

During the third trimester “Beyond the Product”, students develop interaction design solutions for systems with a bigger social and economic context.

This project series is based on a given context (City of Ivrea, Olivetti Tecnost, and the Interaction Design Institute itself) and uses their inherent social and economical structure as a starting point to develop opportunities and visions for interaction designs.

The project aims to stimulate entrepreneurial qualities within the students and give them experience in designing something that is socially valuable and economically sustainable. They will integrate business models into their interaction design work and see what lessons can be learned from the “new economy”.

Students:

- learn about the context they are working for, conduct interviews, and analyse the situation;
- create ideas, realistic and extreme, thinking about utopias as well as distopias.
- focus and define opportunities for a particular aspect they want to develop further.
- in the final design stage they create some of the following outcomes: a clear argumentation of what their project is about, including a vision and a “mission statement”; a plan about how the design could turn into sustainable business; and last but certainly not least, a 1:1 model or working prototype of a particular aspect of the system they are designing. This can either be on the product or service level.



During the third trimester, students concentrate on one of three project domains: “Fast technology for slow cities”, “From consumption to use - innovating services” and “Building as Interface”.

The third term started off with a one-day professional workshop in Ivrea on 16 April about sustainable business models for interactive products and services, and student workshops on 17, 18 and 19 April. The workshops helped to set the research agenda of the Institute, but was also useful for senior managers in industry who have responsibility for the innovation of new services based on information and communication technologies.

Design Innovation Research Laboratory

A collaborative design research studio runs alongside the postgraduate programme.

The research projects, supported by private companies, governments and the European Union, address three broad themes: **Personal Technologies**, which includes wearables and fashion, technology and the home, **Connected Communities**, addressing the question how can we design products and services that support people in their need and desire to share knowledge and communicate feelings, and **Beyond the Product – Into Systems and Services**, looking at services which involve more than just an individual, which require and generate new technical and social infrastructures.

Personal Technologies

Interaction Ivrea is exploring how to use our senses and perception as the origin for designing technology on or connected to the body. The research area covers two areas: Wearable Technology and Machine Organisms (working title).

How can wearing computers extend our potential for communication and expression? Always-on technology and miniaturisation of components creates potentials for new modes of expression. The concept of fashion is becoming increasingly important in our culture. The fashion industry combines sophisticated manufacturing processes with complex and advanced forms of communication. Milan is the fashion capital of the world. Soft and light technologies are being developed that facilitate wearing technology. Interaction can add a new dimension to personal expression through adornment. Our task will be to design services that are useful, daring and cool, to focus on **wearable technology** within the context of design, not technology.

Can we make our interactions with machines as enriching as our interactions with living organisms? How can we simplify our interactions with machines even as they are continually increasing in complexity? The focus here is on making our interactions with machines more engaging, stimulating, and rich. Machines ought to be aware of their environment, adapt to it, and be able to modify their responses. Research in the area currently still defined with the working title **Machine Organisms** seeks to apply the wealth of knowledge from academic research into design research, and investigate how to use behaviour and nonverbal channels (form, sound, colour, movement) to create qualitative and intuitive, fluid and continuous communication.

Connected Communities

How do we manage and visualise information and the ever-increasing volume of information we are all producing? How do we allow people to access it, and each other, from distant places? How to create new forms of communication and interaction via online networks? How can we make the Institute itself and its communication with its worldwide community a case study example of this?

The Interaction Design Institute Ivrea is becoming a major hub in the international network of interaction design. It is a school, a research laboratory and a production site and as such, is in the unique position to be experimental and informative. It is a place for framing debates, setting agendas, sharing knowledge, developing ideas and for education and learning. The aim is to convey these qualities to the online presence of the Institute and to create an online space that enables the international interaction design community to engage each other. The Institute is also interested in experimenting with knowledge representation, as well as designing collaborative online knowledge spaces: e.g. open system architecture, online space forms, central archiving and interfaces such as notice boards, complex visualisations and conversation maps.

Beyond the Product – Into Systems and Services

How can interaction design improve our day-to-day life in a highly networked society? If computers disappear and systems keep on changing, what then will we design?

At the dawn of the 21st century, information and communication technologies are revolutionising the functioning of the economy and society, and are generating new ways of producing, trading and communicating.

This research unit wants to find opportunities and solutions for major social and economic challenges faced by an emerging knowledge-based society, by concentrating on interactive and intelligent systems for the applications and services of this networked society. It wants to shape technologies and integrate them with new appliances, processes and user centred services.

The focus is on the services, systems, flows and processes that are connected to and with products. The work is carried out with the strong awareness that there is indeed a dynamic relationship and transaction between actors, stakeholders and products.

Research Projects 2001-2002

In October 2001, Interaction Ivrea selected 10 student-researchers to be part of the Institute's second year course programme and develop eight-month research projects. The results of their work will be shown in the end of year exhibition in June 2002. Below is a provisional overview of their research projects which are of course not yet finalised.

BOX. A distributed architecture for connected communities

Victor Vina

How can simple physical objects, which are all connected in an open, configurable and modular system, help designers improve communication and information exchange?

BOX is a design experiment, an illustration of how an open-ended design process can yield new and unexpected results, generate new information structures, open up new design spaces and set up new interaction paradigms. The BOX project consists of simple physical objects, a collection of tangible interfaces that collect and broadcast information. Some of them allow for real-time, synchronous, peer-to-peer communication. Others are more complex, asynchronous, community based platforms for discussion and knowledge exchange. The "BOXes" are part of an open, flexible, modular system architecture that members of a connected community can configure and can use to communicate and share information. The objects are dynamic information structures.

BOX is a new and flexible model that allows us to represent, analyse and create platforms for communication and information exchange.

Connected Communities

Chris Remie, Boris Mueller, Josh On

The connected communities research theme, described above, was initiated this year by a team of consultants and inhouse staff.

Faraway

Kristina Andersen, Margot Jacobs, Laura Polazzi

How can we perceive the presence of someone that is not physically here? What can we use to increase the perception of being close during long distance communication?

Although new technologies can increase the opportunities to exchange information, they often also reduce our communication to mere verbal exchange. As a result, some of the richness of face-to-face interaction is lost.

How important this loss is, depends on the situation. However, it plays a crucial role in affective relationships, where physical presence is not only a source of information, but also a value in itself.

FARAWAY investigates the potential of interaction design to enrich our communication with people who are elsewhere and thus to decrease our perception of distance.

Our objective is to design new interactions that incorporate the physical and sensory aspects of our emotions to convey a sense of presence, creating a more intimate and enjoyable experience.

Informal Learning through Seamless Technologies

Silvia Gabrielli and Andy Law

How can we make it easier to learn "on the move" when we don't have access to a desktop, are not connected to each other and it is a lot easier to work on paper?

How can we smooth the transition between working on paper and the use of digital interfaces?

The project analyses situations when people who are separated in time and space, are jointly involved in knowledge discovery, annotation and collaborative inquiry. It then explores through scenarios how the collaboration between these people could be improved through the use of paper-digital media.

More specifically, the scenarios look at how new combinations of portable devices (notebooks, chat pens) and dedicated websites could support activities like the exploration of an eco-museum or a playful treasure hunt.

Mobile Embodiments

Analia Cervini, Juan Kayser and Mack Thomas

How to make use of the environment a mobile phone is used in and the mindset of the user, to create new possibilities for mobile phone technology?

We aim to design more adapted enablers by focusing on the relatively unexplored and undeveloped area that extends beyond the little black box of today's mobile phone and by seeing the phone as the brain of a connected system of contextually fixed devices.

We believe that it is possible to widen the phone's expressive range and create new possibilities for interaction adapted to the particular needs of the user and to the context the phone is used in, through the development of new mobile embodiments: contextually fixed and related bodies through which the phone will express.

Wearable Dreams

Stijn Ossevoort

Can wearable electronic devices portray our feelings and propagate our personality?

Today's wearable electronic devices, like mobile phones, only convey a small facet of our personality. Fashion-items on the other hand easily allow us to communicate our identity. Although often mass-produced, they give us enough space to make a selection that reflects our personalities. This selection is often predefined by the fashion industry, shaped according to our fantasy and desire.

This project identifies existing relations between people and their favourite piece of clothing. In a questionnaire various individuals were asked to fantasise about their favourite piece. These fantasies will be used to design a set of wearable electronic objects that fit these individual relations.

Knowledge Sharing

Knowledge dissemination will be a core process at Interaction Ivrea, commanding a substantial proportion of its time and resources. The Institute will develop multiple channels for knowledge and know-how sharing - with its industrial and business Associates, and with the broader community. We plan that they will include: the opportunity for staff to join projects; special interest conferences and workshops; expertly moderated newsgroups and mailing lists; management-targeted briefings and papers; educational activities and ad-hoc training; reading lists; abstracts, summaries, links; high-profile annual events, and show-piece lectures; publication in academic journals and mass media.

THE INSTITUTE

(Full bios can be found in attachment)

Interaction Design Institute Ivrea is an independent non-profit organisation, supported by Associate Companies. Our founding Associate Companies are Telecom Italia and Olivetti.

The **President** of Interaction Ivrea is Senator Franco Debenedetti.

Ivrea's Director, Gillian Crampton Smith, and **Steering Committee** are world authorities in interaction design and related fields. The Institute's Director founded and ran the world's first graduate course in the subject at London's Royal College of Art.

They are supported by a board of expert advisers, known as the '**Explorers' Club**'. From John Maeda to Ettore Sottsass, these are leaders in their fields.

Senator Franco Debenedetti – President

Franco Debenedetti is a Senator of the Italian Republic. He was born in Turin in 1933, where he obtained a Degree in Engineering. For twenty years he worked at his family's company. He was then Director of the Components Division of the Fiat Group. He became Managing Director of the Olivetti Group in 1976 and later on President of Olivetti Information Services. He was also the President of the Sasib Group. He decided to leave the corporate world when he ran for Senator in 1994. He is the founder and President of the Interaction Design Institute Ivrea, and a board member of CIR, Cofide, and of the Rodolfo Debenedetti Foundation.

The Steering Committee

The Steering Committee consists of Barbara Ghella, John Thackara, Bill Verplank, Marco Zanini and Ivrea's Director Gillian Crampton Smith.

Barbara Ghella

Having studied medicine at Turin University, Barbara Ghella worked as Information Systems Manager at HAUT, also in Turin. In 1990, she moved to Olivetti Information Services, where she was Communication Coordinator. Since 1992, Barbara Ghella has been Chief Executive Officer of MiLàNo Interaction Design in Milan, where she worked on interface solutions for such diverse clients as the police, a major Italian insurance group; public psychiatric institutions, day hospitals and other health care facilities, an advanced training centre of Fiat Melfi and Fiat Auto.

John Thackara

An expert on design and innovation, John Thackara is director of Doors of Perception – the conference and knowledge network based in Amsterdam. Prior to this, he was the first director (1993-99) of the Netherlands Design Institute. He is currently Visiting Professor at Interaction-Ivrea, consultant for New York's MOMA, and runs design scenario workshops for companies. John Thackara studied philosophy and journalism before working in publishing in London and New York. He edited Design for four years and was Modern Culture Editor of Harpers & Queen. During the 1980s, he set up and directed Design Analysis International (DAI), a consultancy and production company with offices in London and Tokyo. He has written policy studies for governments and companies, lectured in many countries, and is the author of nine books.

Bill Verplank

An interaction designer, human-factors engineer and visiting scholar at Stanford University, Bill Verplank studied mechanical engineering and product design at Stanford (1960-65), returning there to teach 'visual thinking' (1971-74). He obtained his PhD (in 1977) from MIT in man-machine systems. At Xerox (1978-86) he helped to test and refine the Xerox Star graphical user interface and then worked as a design consultant at IDTwo and Ideo (1986-92). He coined the phrase 'interaction design' to denote what had previously been known as 'user-interface design.' At Interval Research (1992-2000), he directed research and design for collaboration, tangibility and music. During this period he worked at Stanford to establish a studio course on interaction design, which he then taught for five years. For the past two years, he has taught an experimental course on input devices.

Marco Zanini

An architecture graduate of Florence University, Marco Zanini spent several years in the USA before returning to Milan to work as an assistant to Ettore Sottsass in 1977. He subsequently became a partner and managing director of Sottsass Associates. In 1981, he was one of the founder members of Memphis. Marco Zanini also works independently, designing ceramics, jewellery, furniture and objects in blown glass. He has lectured on architecture and design in Japan, the USA, Australia, New Zealand, Colombia, Chile and Spain. He is also a founding member of the Milan-based cultural group ABC. With Sottsass Associates, he has been design manager on many projects, including office furniture for Knoll International and retail stores for Esprit, as well as exhibitions, interiors and industrial products for a variety of international clients.

The Explorers' Club

The Explorers' Club brings together experts from around the world who are at the forefront of a particular aspect of this new subject. We have chosen the name 'Explorers' Club' (rather than the more pedestrian 'Advisory Committee') because we want its members to challenge us to explore: new directions, new subjects, new people, and new approaches.

Red Burns	(USA)	Chair of the Interactive Telecommunications Program (ITP) at New York University's School of the Arts, New York
Leonardo Chiariglione	(Italy)	Executive Director of the Secure Digital Music Initiative (SDMI)
Irie Keichi	(Japan)	Architect at IAMAS University, Ogaki
David Kelley	(USA)	Professor of Industrial Design at Stanford University and President of IDEO Product Development
David Liddle	(USA)	General Partner of U.S. Venture Partners; Former President and CEO of Interval Research Corporation
John Maeda	(Japan)	Designer and Theoretician; Associate Director, MIT Media Lab, Cambridge (MA)
Ranjit Makkuni	(India)	Researcher at Xerox PARC, Palo Alto (CA)
Irene McWilliam	(UK)	Professor of Computer Related Design at the Royal College of Arts, London
Bill Moggridge	(UK)	Founding Partner of IDEO Product Development
Joy Mountford	(UK)	Former Manager of the Human Interface Group at Apple and Founder IDBias Interaction Design, California
Nathan Shedroff	(USA)	Interaction Design Consultant and Writer
Ettore Sottsass	(Italy)	Architect and Designer
Marco Susani	(Italy)	Director of the Motorola Advanced Concepts Team, Boston (MA)
Terry Winograd	(USA)	Professor of Computer Science at Stanford University

ACADEMIC AND INSTITUTIONAL STAFF

(Full bios can be found in attachment)

Academic Staff

The academic staff consists of the Director Gillian Crampton Smith, Professors and Associate Professors, a Workshop Manager plus visiting Professors and lecturers. They were selected through a worldwide search coordinated by the specialised recruiting agency Wert & Company of New York.

Gillian Crampton Smith – Director

Having studied philosophy and history of art at Cambridge University, Gillian Crampton Smith graduated in 1968 and spent the following decade as a designer - first in book publishing, then on the Sunday Times and Times Literary Supplement. She joined St Martin's School of Art in 1983 where she set up a new postgraduate course in graphic design and computers for practising designers. In 1989 she moved to the Royal College of Art where she established the highly regarded Computer Related Design Department.

Walter Aprile – Technology Associate Professor

As Director of Telecommunications at ILCE, a distance education organisation in Mexico, Walter Aprile oversaw the implementation of web publishing tools that reached over 6000 Mexican schools. Prior to that, he worked on Italian-English machine translation at Carnegie Mellon University.

Michael Kieslinger – Associate Professor

Michael Kieslinger is an interaction designer whose work focuses on issues of time and collaboration. He worked for five years with KACOR, a Swedish research group, where he developed the software for Sensorg - an experimental system for professional musicians and composers. He also created multi-media arts installations.

Giannino Malossi – Professor

As consultant in communications strategy for the fashion and design community, Giannino Malossi has worked for a variety of companies and organisations, including the Camera Nazionale della Moda Italiana, the Agenzia per la Moda di Roma and the ADI (Associazione Disegno Industriale, Milano). He conceived many research projects, exhibitions and books on mass media and pop culture.

Stefano Mirti – Associate Professor / Community Steward

Stefano Mirti is an architect who has worked in Italy, Tokyo, Seoul, Bangkok and the Mekong Delta. From 1998 to 2001, he was Post-Doctorate Researcher at Tokyo University and lectured at Tama Art University (Tokyo). In Italy, he founded Cliosstraat, a design group of architects, artists and photographers that designed houses, parks, public facilities and exhibition pavilions.

Casey Reas – Associate Professor

Casey Reas studied and worked on interface and information design at the M.I.T. Media Laboratory. He has been Design Director at leading New York based web design firms and his installations have been exhibited at various museums including MoMA.

Jan-Christoph Zoels – Senior Associate Professor

As Director of Information Architecture at Sapient (New York), Jan-Christoph Zoels was responsible for strategic direction, creative scope and the integration of the user experience. He was previously Senior Designer at Sony Design Center USA, where he was responsible for strategic product development.

Edoardo Brambilla – Workshop Manager

Edoardo Brambilla is a product developer and style design consultant who has worked for many of the major industrial, design and architecture firms in Italy. He has also been a designer of products, models and presentations for Arch. Mario Bellini.

Institutional Staff

Mauro Demarziani – Operations Manager

An Engineer and Business Manager by training, Mauro Demarziani brings to Interaction Ivrea over 15 years of national and international planning and administration experience. He worked as Technical Director of the industrial automation equipment company Fata Automaton, headed departments and companies of the Cerutti printing group, and was responsible for product marketing at Olivetti.

Mark Vanderbeeken – Communications Manager

A specialist in international communications, PR and marketing, Mark Vanderbeeken worked as European Communications Coordinator for the World Wide Fund For Nature (Denmark), Marketing Director of Gwathmey Siegel & Associates Architects (New York), and Chief Press Officer of Antwerp 93, Cultural Capital of Europe (Belgium).

Carlo Talamona – Technology and Facility Manager

An architect by training, Carlo A. Talamona is a specialist in design and implementation of large-scale ICT systems, structural re-organisations and integration of multi-disciplinary teams. He worked as a strategic consultant for many private and public companies and held strategic positions at the City and Province of Turin. At Interaction Ivrea, he is responsible for the design and implementation of information, communication and web technology, and set up the entire technological infrastructure, the security systems, and the teaching and research networks.

Antonello Alessi – Handyman

Luca Arbore – Account Manager

Lisa Ardenghi – Administration Office
Support

Daniela Bauducco – Assistant to the
Operations Manager

Holly Coleman – Web Manager

Claudia Lizier – Academic Administrator

Roberto Lusso – System Manager
Assistant

Valerio Madau – Receptionist and
security

Giuliano Monte – Events Organiser

Helen Raiano – Assistant to the Director

Chris Remie – Web Applications
Developer

Silvia Rollino – Communication Link and
Student Support

Andrea Stabile – Management Assistant

Riccardo Stura – Junior System Manager

Silvio Valentino – System Manager

THE STUDENTS AND RESEARCHERS

The protagonists of the first academic year of the Interaction Design Institute Ivrea are twenty-four students and ten researchers. The selection criteria were their educational background, professional excellence and the Institute's desire to create interdisciplinary and multi-disciplinary working groups consisting of people with backgrounds in design (i.e. industrial, architecture, arts, communications, graphic design), computer science, engineering, or human sciences

The average age of our students and researchers is 29 and most of them have degrees already. Seven of them come from Italy, twelve from the rest of Europe, and sixteen from other countries, including the United States, India, Japan and Venezuela. Most of their backgrounds are in graphic design (6), interaction design (5), computer science (4), industrial design (4), and psychology (3).

All courses are held in English. Those who do not speak Italian will take Italian language and culture courses.

First year students

(Full bios can be found in attachment)

Simona Brusa Pasquè (Italy) – Literature and Philosophy / Web Design

Mario Chiesa (Italy) – Electronic Engineering / Web and Multimedia Development

Line Ulrika Christiansen (Denmark) – Interactive Multimedia

Rajesh Dahiya (India) – Communication Design / Interface Design

Shyama S. Duriseti (India) – Communication Design / Information & Interface Design

Ryan Genz (USA) – Art / Interface Design / Information Architecture

Franziska Huebler (Germany) – Fine Art / Computer Science / Web Design

Misel Kovacic (Croatia) – Graphic Design / IT / Web Design

Francis Li (USA) – Computer Science / User Interface

Dianna Miller (USA) – Art Media Studies / Interface Design

Kim Mingo (USA) – Interface Design

Chris Noessel (USA) – Graphic Communications / Information Architecture

Sergio Paolantonio (Italy) – Industrial Design

Deepak Pakhare (India) – Communication Arts / New Media Design

Jan Raposa (Slovenia) – Interactive Media Design

Francesca Rosella (Italy) – Interior Architecture

Rikako Sakai (Japan) – Industrial Design

Oscar Salazar (Venezuela) – Social Communications / Marketing / Interactive Media

David Slocombe (United Kingdom) – Design / Product Interaction Design

Natasha Sopiaeva (Turkmenistan/Portugal) – Linguistics / Computer Science / Web Design

Livia Sunesson (Sweden) – Interaction Design

Jason Tester (USA) – Interaction Design

Magnus Torstensson (Sweden) – Interaction Design

Second year students (researchers)

(Full bios can be found in attachment)

Kristina Andersen (Denmark) – Industrial Design / Interface Design

Analia Cervini (Argentina) – Industrial Design

Silvia Gabrielli (Italy) – Psychology / Human-Computer Interaction

Margot Jacobs (USA) – Industrial Design

Juan Kayser (Argentina) – Industrial Design

Andy Law (United Kingdom) – Product Design

Stijn Ossevoort (Netherlands) – Engineering / Industrial Product Design)

Laura Polazzi (Italy) – Communication Sciences

Mack Thomas (USA) – Psychology / Advertising / Cognition

Victor Vina (Spain) – Industrial Design / Interaction Design

THE CAMPUS

The Institute's home is the 'blue house', designed by Eduardo Vittoria in the 1950s as a research centre for the Olivetti group. A unique cross-shaped structure at the edge of a park, with exterior walls covered in blue ceramic tiles, the 'blue house' is a building full of light. When it became the home of the new Institute, it was dedicated to the memory of Adriano Olivetti.

The institute has four levels, each surrounded by terraces or balconies. A wireless network for the terraces and grounds allows connectivity outside. In the basement are newly equipped workshops, an archive and a prototyping space suitable even for full-size installations.

On the ground floor, there is a reception, a conference hall, a beautiful library, a gallery space for exhibitions, a lounge and a cafeteria.

The first floor is entirely dedicated to the graduate students, with studios, lecture rooms and meeting spaces.

Administration, professors' and Associate professors' offices as well as two research labs are on the second floor.

Redesigned in 2000 by Ettore Sottsass and Marco Zanini, the building has been upgraded with new lecture rooms and work spaces to nurture a sense of community and new technology research.

Marco Zanini explains: "We designed it to be a space that allows many different kinds of activity, from sawing and knitting to building full-size installations; from an electronic shop to a media lab."

"As much as possible, the building was thought of as a community and a place that nurtures teamwork, with open spaces where people can see and hear each other but with the possibility for a degree of privacy, when required. Technology is state-of-the-art, to be used or hidden away when needed. It is as unobtrusive as possible."

"The building is not over-designed, because this is the place where design is born, and a neutral background is very important."

Students and researchers are housed in the landmark "Unita' Residenziale Ovest" – also known as Talponia – a unique building with a semicircular shape, designed by the architects Gabetti and Isola in 1970.

The "Blue House" and "Talponia" are both typical examples of the Olivetti architectural tradition and are therefore included in the trajectory of the new Museum of Modern Architecture in Ivrea.

ATTACHMENT: BIOGRAPHIES

Contains Explorers' Club, Steering Committee, Staff and Students

In alphabetical order by last name

Antonello Alessi (Handyman) is responsible for maintenance operations and shipping at Interaction Ivrea. Having worked as an artisan before, he has in-depth knowledge of maintenance, repairs, mechanics and special materials.

Kristina Andersen (Researcher) – Previously Senior HCI Engineer and lead interface designer for Mediasurface. Projects vary from experimental interface design and information management to conceptual objects ranging from wearable furniture to toys. Projects include reGossip with Jussi Holopainen and Ron Wakkary, a research game platform using gossip and game play to generate collaborative narratives and WAG, a project researching mobile phone text messaging for teenagers. She has an MA in industrial design [specialising in wearable computers] and M.Sc in Virtual Environments.

Walter Aprile (Technology Associate Professor) worked as Director of Telecommunications at ILCE (Istituto Latinoamericano de la Comunicación Educativa), a distance education organisation in Mexico City, where he was responsible for the LAN, the WAN, the organisational intranet and the web publishing system. He oversaw the implementation of web publishing tools that reached over 6000 schools in the Mexico Federal School System. Prior to this, he worked as a Visiting Researcher at the Language Technology Institute of Carnegie Mellon University (Pittsburgh, USA) and wrote an effective machine translation model of a subset of Italian grammar using Common Lisp and a specialised unification grammar.

In the early days of the web, he created Internet content in the Macintosh environment for one of the first internet start-ups in Italy.

He has a degree in Computer Science from the Statale University of Milan with a thesis on autonomous agents in a text-based virtual reality. He also studied Linguistics at Istituto di Scienze Cognitive of San Raffaele and Lexicography at the University of Amsterdam.

In addition, he has been active in the virtual communities field, first as an administrator and developer of LittleItaly, the first Italian language MOO, and then as editor of Everything2, an online collaborative writing environment.

Luca Arbore (Account Manager) – After graduating in Economics at Turin University, Luca Arbore was in charge of trade at AEG Ivrea, which distributes and sells methane gas to 25.000 customers. At Interaction Ivrea, he is Account Manager, which includes responsibility for budgeting, administration, contracts, order forms, staff and payments. He is the Workers and Employees' Safety Representative according to Italian laws.

Daniela Bauducco (Assistant to the Operations Manager) has over 10 years of work experience with multinational companies. After starting her career at Olivetti, she became product manager and later on building trade marketing manager at Sigma Coating (Petrofina Group). Before joining Interaction Ivrea, she was in charge of customer fidelity for FINA's marketing department.

Edoardo Brambilla (Workshop Manager) is a product developer and style design consultant who has worked for many of the major industrial, design and architecture firms in Italy.



Interaction
Design
Institute
Ivrea

His wide product development experience includes access control devices (for Microdata and Omniticket Network), automatic cash registers (for ABB Dacom and Tecnotour), automobile design (for Bugatti auto and Lamborghini), automatic or remote controlled transport trolleys (for Pianelli & Traversa), baby product design (for Chicco Artsana), bathroom interior design and accessories (Ideal Standard, Laufen and Pozzi Ginori), campers (for Kelber), car accessories (for Berman), coffee machines (for Cimbali, Illy Caffè and Faema), diagnostics machinery (for Velp Scientifica and Instrumentation Laboratories), fashion fair stands (for Corneliani, Pitti Immagine, Romeo Gigli and W.S. and I.F.T.), furniture (for Molteni and TIM-Dealer Mobile), info kioks (for Editoriale Domus), interior design articles (for Alessi, Colombo e Valli, Guzzini Nava Design, Pandorea Design, Serafino Zani, W.F.M., and Zani e Zani), lighting systems (for Artemidi, Candle, Cini e Nils, Flos, Guzzini, Luceplan, Lumina Italia, Segno and Tronconi Illuminazione), motorway tollgates (for Eltec System, Tecnost and Tecnotour), museum and amusement park access devices (Gardaland, Hannover 2000 and Omniticket network), office interior design (for Coop Sette for the Paietta brothers), package design (for Reckitt & Colman Italia), type-writer modeling (for Olivetti), and watches (for Benetton and Swatch).

In addition, he worked for the architecture firms of Sottsass Associati, Matteo Thun, Antonio Citterio, Gae Aulenti, Federica Zanuso, Studio Mendini, Gianfranco Frattini, Hans Von Klier, Marco Piva, Lissoni, Dante Benini e Associati, Francesco Trabucco e Associati, and Michele De Lucchi.

Before becoming independent, he was employed at Design International and at the studio of the architect Mario Bellini.

He studied at the Istituto Statale d'Arte in Monza, where he obtained a Master's Degree in Applied Arts (cum laude) and then went on to study architecture (summa cum laude) at the Milan Polytechnic. His Milan graduation project was a lightweight scooter that could be carried onto public transportation, which he developed under the guidance of the architect Marco Zanuso.

Red Burns (Member of the Explorers' Club) is the head of the Interactive Telecommunications Program (ITP) at New York University's School of the Arts. In 1971, she founded the Alternate Media Center, a research and implementation centre for new technologies. During the 1970s and 1980s, she designed and directed a series of telecommunications projects including two-way television for and by senior citizens, and applications for the developmentally disabled. She recently received the Mayor of New York's Award for Excellence in Science and Technology.

Simona Brusa Pasquè (Student) obtained a degree in Literature and Philosophy from the Catholic University of Milan in 1998. She worked for Yond and Altoprofilo, two of Milan's leading web companies, focusing on developing concepts with clients, information design, and refining a rapid usability evaluation method. At Interaction Ivrea, she is exploring interaction design more thoroughly, while expanding her prototyping skills and knowledge of technology.

Analia Cervini (Researcher) – At present Analia Cervini is working on Mobile Embodiments research project at Interaction Ivrea. She still collaborates with architect Giulio Ceppi at Totaltool Milano, focusing mainly on research and design strategy. At Philips Design Milan she worked on new concept generation for Andersen Windows Project. As a product designer she was responsible for the research and design of innovative and sustainable home furnishing products for Tensocable. Born in Argentina, she graduated and taught as an Industrial Designer at the University of Buenos Aires.



Interaction
Design
Institute
Ivrea

Leonardo Chiariglione (Member of the Explorers' Club) – Since 1991, Leonardo Chiariglione has been at CSELT, the corporate research centre of Telecom Italia. He is currently Executive Director of the Secure Digital Music Initiative (SDMI), whose purpose is to develop technical specifications for securing music across all digital delivery platforms.

Mario Chiesa (Student) – After his studies in Electronic Engineering at the Politecnico di Torino graduating in 1995, he has been working as a consultant for Politecnico di Torino, TelecomItaliaLab, CoREP, BasicNet and Torino Internazionale. He is skilled in web and multimedia development, concept design, programming, project management and production.

Line Ulrika Christiansen (Student) received her bachelor's degree from Designskolen Kolding in Denmark with a focus on Interactive Multimedia. In spring 1999 she was involved in the production and design of the documentary CD-ROM "Emotion and immersion in the interactive experience". From 2000 to 2001 she worked with the architectural and interior company in Copenhagen, MC arkitekter-Moving Concept where she was responsible for graphical presentations and website design.

Gillian Crampton Smith (Director) – Having studied philosophy and history of art at Cambridge University, Gillian Crampton Smith graduated in 1968 and spent the following decade as a designer - first in book publishing, then on the Sunday Times and Times Literary Supplement. In 1981, she designed and implemented a page layout program to help her with magazine design - an early desktop publishing application. This experience convinced her that artists and designers have an important role to play in creating information technologies. She joined St Martin's School of Art in 1983 where she set up a new postgraduate course in graphic design and computers for practising designers. In 1989 she moved to the Royal College of Art (the UK's only purely graduate school of art and design). At the RCA, she established the Computer Related Design Department, where artists and designers apply their traditional skills to interactive products and systems. Under her guidance, the CRD Research Studio achieved an international reputation as a leading centre for interaction design, supported by a wide range of industrial sponsors.

Rajesh Dahiya (Student) graduated after studying communication design (majoring in Graphic Design). He initially worked as a graphic designer for print production and corporate identity and later shifted to the IT industry and designed interfaces for websites and voice recognition systems. Before joining Interaction Ivrea, he worked for one year as a usability specialist and is now how interaction design can be used for a worthwhile cause. How do we change the way the world perceives design?

Senator Franco Debenedetti (President) - Franco Debenedetti is a Senator of the Italian Republic. He was born in Turin in 1933, where he obtained a Degree in Engineering. For twenty years he worked at his family's company. He was then Director of the Components Division of the Fiat Group. He became Managing Director of the Olivetti Group in 1976 and later on President of Olivetti Information Services. He was also the President of the Sasib Group. He decided to leave the corporate world when he ran for Senator in 1994. In 1996, he won the "Ezio Tarantelli" award for the best idea of 1995 in Economics and Finance. He received the 1999 "Capalbio" award for Economics and was also proclaimed honorary citizen of the town of Capalbio. He is the founder and President of the Interaction Design Institute Ivrea, and a board member of CIR, Cofide, and of the Rodolfo Debenedetti Foundation.

Mauro Demarziani (Operations Manager) brings to Interaction Ivrea over 15 years of national and international planning and administration experience. Most recently, he was Technical Director of Fata Automation, an industrial automation equipment company in Turin. From 1990 to 1999, he worked for Cerutti, a global company specialised in printing and converting technologies. First he was Central Director of Cerfin, a holding company that dealt with the administration, financial, industrial and organisational co-ordination of Cerutti's subsidiaries and partners. He then became Head of Cerutti's Mechanical Design Department. He also simultaneously became Director of the Cerutti companies Coficer and Siec - the former specialised in engineering and mechanical design, the latter in the engineering of environmentally friendly graphics products. His career started at Olivetti's Planning and Control Department, where he participated in a major logistic restructuring project, and was then made responsible for Product Marketing of Olivetti's asynchronous terminals range. Mauro Demarziani studied Aeronautic Engineering at the Turin Polytechnic. He also obtained a MBA at SDA Bocconi in Milan.

Shyama S. Duriseti (Student) – As a visual communication designer, Shyama S. Duriseti has worked on information & interface design projects for various online applications, products, identities and streaming media services. He has strong interests in interface design, graphic design, multidisciplinary information design and interactive spatial systems.

Silvia Gabrielli (Researcher) has been involved in human-computer interaction as a researcher since her master degree in Occupational Psychology (University of Padova, Italy), in 1994. During her PhD in Cognitive Sciences (1996-2000) she has worked on the design and evaluation of educational technologies for young children, by participating to different European Projects and collaborations. Before joining Interaction Ivrea, she was a Research Fellow at the University of Sussex' School of Cognitive & Computing Sciences within the Equator EPSRC project. She is currently involved in researching 'Mobile Learning in Mixed-Reality Places' and in the 'Design for Future Needs' (DFFN) European project.

Ryan Genz (Student) – Earning his undergraduate degree in the fields of Studio Art and Anthropology from the University of Maine, Ryan was a key figure in the developing media lab ASAP Media Services. Following, he worked several years creating Interface Design, Research, and Information Architecture with Signal Interactive, a leading Chicago development team.

Barbara Ghella (Member of the Steering Committee) – Having studied medicine at Turin University, Barbara Ghella worked as Information Systems Manager at HAUT, also in Turin. In 1990, she moved to Olivetti Information Services, where she was Communication Coordinator. In this capacity she was responsible for the implementation of strategies, operational supervision and guidance of all communication activities in connection with enterprises belong to the OIS group.

Since 1992, Barbara Ghella has been Chief Executive Officer of MiLàNo Interaction Design in Milan. Here, major interface system projects have included: nationwide implementation of the interface functions of a data system concerning all emergency calls to the police (i.e. 113 service); back office logistics and operations by employees and officers of Toro e Nuova Tirrena (a major Italian insurance group); regional interface system relating to public psychiatric institutions, day hospitals and other health care facilities throughout Piedmont; communication study and related implementation on behalf of an advanced training centre of Fiat Melfi; application tests relating to the introduction of an interface system belonging to the Fiat group (Fiat Auto, Lancia, Autobianchi, Alfa Romeo).

Franziska Huebler (Student) received her Diploma in Fine Art from the Hochschule für Bildende Künste in Hamburg, Germany. Franziska's interest in computers changed from fine art to science when she enrolled herself in the Computer Science course at the University of Hamburg. Having run her own studio in Hamburg, she moved to New York City where she worked as a Senior Designer for clients such as Bertelsmann Music Group (BMG), David Bowie, the New York Yankees, and the Museum of Modern Art (MoMA).

Margot Jacobs (Researcher) – Currently working on the 'Faraway' research project. Margot has a B.S. in Industrial Design from Georgia Tech and a MA from the Interactive Telecommunication Program, NYU. Her work focuses on the interplay between people in public and private settings. Projects include: 'Breathe', Honorable Mention from the LIFE Artificial Life competition and 'Front', accepted for 'Emerging Technologies' at SIGGRAPH 2002.

Juan Kayser (Researcher) is an Industrial Designer who has worked in Buenos Aires and Milan. As collaborator of the design consultancy firm Totaltool Milano he was involved in product identity and environmental design projects. In Buenos Aires, he worked as a design consultant for clients ranging from telecommunication companies to sustainable local development organisations. He also taught at the University of Buenos Aires.

Irie Keichi (Member of the Explorers' Club) – A Japanese architect, Irie Keichi has a strong interest in interaction design and a keen involvement with digital culture. Since the early 1990s, he has explored the new design space opening up where the real and the virtual converge. He now teaches a studio at IAMAS University, in Ogaki, Japan, and lectures widely.

David Kelley (Member of the Explorers' Club) – A Professor at Stanford University, David Kelley leads programmes that are redefining product design. His work as a teacher and as a manager emphasises the combination of innovation, human values and aesthetics into a single process. He was also the founder and head of the world-famous product design firm, IDEO.

Michael Kieslinger (Associate Professor) – As an interaction designer, Michael Kieslinger worked as a researcher for five years with the KACOR group (based at Sweden's Royal Institute of Technology), where he developed the software for Sensorg – an experimental instrument for professional musicians and composers. For this work he won an Austrian Award for Scientific Work in New Media.

He also created multi-media arts installations and an interactive online-museum, and gave lectures, concerts and shows of his work throughout Europe and Asia.

He studied Computer Related Design at the Royal College of Art (London) and Computer Music at the Academy of Music in Vienna (Austria).

His interaction design work is focused on aspects of time and time-experience, ubiquitous computing, and collaborative systems.

Misel Kovacic's (Student) interest in graphics design began when he was still in high school working on several projects in the field of web and print design. He studied graphics design and IT in his home country Croatia and worked as a freelance for several web agencies. Some his personal web projects were presented at the Croatian Design Annual 2001.

Andy Law's (Researcher) work has covered such subjects as 'The Impact of Technology on the Workplace Environment', 'Post Industrial Aesthetics', 'Terminal Product Affairs', 'Object Relationships Creating Places for Interface', 'Zero, Intuitive Interfaces Through Objects for Networked Digital Products', 'Quaquaversal, a Post Mass Card from a Flexible Future', 'Time

Based Workplace', 'Large Site Navigation', 'Old Media Content Usage Online', 'Ocellar, Large Image Displays', 'Immersive Narrative Generation', and 'Mixed Reality Interfaces for Retail'.

Francis Li (Student) received his B.A. and M.S. degrees in Computer Science from the University of California at Berkeley in 1998 and 2001, respectively. In addition to working with the Group for User Interface Research at U.C. Berkeley, he has interned at Microsoft Research and Sun Microsystems Laboratories. As a student at Interaction Ivrea, he is exploring and expanding his interests, bringing his technical skills in understanding and prototyping technology to new domains and desires.

David Liddle (Member of the Explorers' Club) – Prior to joining US Venture Partners, a Silicon Valley venture capital firm, in January 2000, David Liddle was president and CEO of Interval Research Corporation. This Silicon Valley-based laboratory and incubator for new businesses focuses on broadband applications and services, consumer devices, interaction design and advanced technologies. At USVP, his investments span wireless, networking, components, and e-commerce. He is also a consulting professor of Computer Science at Stanford University.

Claudia Lizier (Academic Administrator) worked as Sales Engineer for Tecdis, a company specialised in LCD design and manufacturing. In 1988-89, when Tecdis was part of the Seiko Group, she lived and worked in Japan. Claudia graduated in electronics and telecommunications.

Roberto Lusso (System Manager Assistant) worked since 1992 to 1998 as consultant in tv-graphics for sports events. With his small company created in 1995, he also began to sell pc-based solution for the home user and the office, becoming an expert in "wintel" platforms. From 2000 he works full-time at Elea, a leading company in information technology and e-learning.

Valerio Madau (Receptionist and security) has worked in security and surveillance since 1989. He started off working for Olivetti, and was later on in charge of industrialist Carlo Debenedetti's personal security.

John Maeda (Member of the Explorers' Club) – After receiving undergraduate and graduate degrees in computer science from MIT, John Maeda returned to his roots in Japan to study art and design at the University of Tsukuba. He is now Sony Career Development Professor of Media Arts and Sciences and Director of the Aesthetics and Computation Group at MIT's Media Lab. Esquire magazine nominated him as one of the '21 Most Important People of the 21st Century' for his contribution to visual culture.

Ranjit Makkuni (Member of the Explorers' Club) – A researcher in multimedia and active learning technologies, Ranjit Makkuni has been affiliated with Xerox Palo Alto Research Center since 1985. At Xerox Parc, his work pioneered the use of computing and video technologies to support design processes. Ranjit Makkuni's work marks a strong departure from traditional text-based approaches to computer interaction. He explores non-textual, multimedia interaction techniques, including through gestures, sound, and movement browsing technologies.

Giannino Malossi (Professor) is a consultant in communications strategy and worked for a variety of companies and organisations, including the Camera Nazionale della Moda Italiana, the Agenzia per la Moda di Roma, and the ADI Associazione Disegno Industriale, Milano). His



Interaction
Design
Institute
Ivrea

most recent project is “New Media de Luxe” a multimedia installation devoted to redefine the concept of luxury in “alternative” media, realised in July 2001 in Rome and designed by Arch. Massimiliano Fuksas.

He is the author of various publications, the most recent are “The Style Engine: Spectacle, Identity, Design and Business; How the Fashion Industry Uses Style to Create Wealth” (Monacelli Press, 1998); “Volare: The Icon of Italy in Global Pop Culture” (Monacelli Press, 1999); and “Material Man: Masculinity, Sexuality, Style” (Abrams, 2000). These books were also made into exhibitions that took place at Stazione Leopolda in Florence and were designed by architects such as Italo Lupi, Achille Castiglioni, Gianfranco Cavaglia and Luigi Cerri. The “Material Man” exhibition was shown at the Art Directors Club in New York as well. He created and directed the Fashion Engineering Unit (1996), a multidisciplinary international research group that studied the fashion industry and its relations with industrial design, communications and economy.

In 1978 he created “Fiorucci Dxing”, a pioneering experiment that systematically analysed fashion and cultural trends and culminated in important exhibitions, including “Il senso della moda” at the Fourteenth Milan Triennale (1979), “Tipologie dei comportamenti di moda” at the Venice Biennale (1980), and “Ricerca sul decoro” for the Centro Studi Domus directed at the time by Arch. Alessandro Mendini (1980).

His theoretical and practical involvement in communications, design and fashion started in 1975, while studying philosophy at the Statale University in Milan, when he joined the creative staff of Fiorucci, a unique unit that generated the communications, graphic and designs of the products of the avant-garde fashion company. Some of his works of that time are in the permanent collection of the Victoria & Albert Museum in London.

Irene McWilliam (Member of the Explorers' Club) is Professor of Computer Related Design at the Royal College of Arts in London. Until 2001, she was Director of Design Research and Development at Philips Design in the Netherlands, where she not only steered research into traditional design disciplines, such as product development, user interface design and graphic design, but also explored the newer territories of socio-cultural trends, behavioural research, cultural contextualisation and strategies for innovation. She is advisor to the European Commission, and coordinated the research theme, ‘Connected Community,’ within the long-term research domain of ‘Intelligent Information Interfaces.’

Dianna Miller (Student) has developed interfaces for interactive TV applications at Microsoft WebTV, MetaTV, and iSurfTV. As a consultant, she created Web sites and content strategy for companies such as Apple, Viacom, and Disney. She has a BFA in Art Media Studies (Film/Video) from Syracuse University.

Kim Mingo (Student) worked as an interface designer for the Sony Design Center for five years where she focused mainly on design for digital and interactive TV platforms. She then began freelancing and worked with companies such as Arnold communications, Palm Inc., Sony, and Fidelity Investments on a variety of web and product interfaces.

Stefano Mirti (Associate Professor / Community Steward) is an architect who has worked in Italy, Tokyo, Seoul, Bangkok and the Mekong Delta.

From 1998 to 2001, he worked as a Post-Doctorate Researcher at Tokyo University and lectured at Tama Art University (Tokyo). He there designed such unique projects as the “polycarbonate house” and the “neon gardens”, and initiated Now the Future, a project for a digital image atlas of the world.

While in Italy, he was one of the founders of Cliostreet, a design group of architects, artists, and photographers, that designed houses, parks, public facilities (including the library and the

“Owl” building in Quarrata, Italy), sports facilities (San Giovanni, Italy), and temporary exhibition pavilions.

He was three times awarded the prestigious European architectural prize (1995, 1997 and 2001).

He studied architecture at Torino Polytechnic (Italy) and obtained his Doctoral Degree with a PhD thesis (“Kiss The Future”) on the architects Charles Eames and Franco Albini.

Stefano Mirti also taught at his former Department of Architecture in Turin.

Bill Moggridge (Member of the Explorers' Club) – One of the most influential industrial designers of the past twenty years, Bill Moggridge graduated from London's Central School of Art to found Moggridge Associates in 1969. In the early 1980s, he designed the acclaimed GriD compass computer – a precursor of today's laptop. In 1991, Moggridge Associates merged with ID TWO to form Ico. This company is now one of the world's most influential international design consultancies, with offices in London, Tokyo, California and Germany. Bill Moggridge is Visiting Professor of interaction design at the Royal College.

Giuliano Monte (Organisation and Building Manager) graduated in 1999 in European Business with Technology at Turin Polytechnic and at Brighton University. He collaborated with Pininfarina and Rolls Royce Motor Cars on the engineering process of the Bentley Azure car. Later on, he worked as quality control director for Fonderie 2A and for Promec Engineering, a leading company in internal combustion engine design. Since 1994 he is first double bass player with the Piedmont Symphonic Orchestra.

Joy Mountford (Member of the Explorers' Club) has been designing and managing interface design efforts for over 20 years. Most recently she was at Interval Research Corporation for over 5 years leading a series of musical development projects. Previously she was the creator and manager of the highly acclaimed Human Interface Group at Apple Computer for nearly eight years. Before joining Apple, Joy worked at MCC, an A.I. computer consortium and prior to that she designed advanced user interfaces for military avionics systems at Honeywell.

Chris Noessel (Student) returns to graduate studies after 10 years working in the new media. After graduating summa cum laude with a BFA in graphic communications, Chris led the development of digital interactive projects for a science museum in Houston, Texas. He has since owned his own new media company and worked as Director of Information Architecture in an international web consultancy. His studies in interaction design are tailored towards returning to exhibit design after graduation.

Stijn Ossevoort (Researcher) studied both engineering and art related design. He completed an MSc in Industrial Product Design at Delft University and an MA in Design Products at the Royal College of Art in London. His work has been as diverse as his academic background, from interactive jewellery to pieces for public sculptures, and has been published in the Independent, Form magazine, INview and ZOO. At the moment he consults for Ron Arad, Philips, Canary Warf and the National Trust in London and is a part time teacher at Central Saint Martins in London on drawing and design related topics.

Deepak Pakhare (Student) graduated in Communication Arts from the Sir J. J. Institute of Applied Art, Mumbai, India. He has worked in new media in various capacities during the last 7 years. Prior to his studies at Interaction Ivrea, he worked as an interactive architect with Plexus Technologies, Mumbai.

Sergio Paolantonio (Student) graduated in Industrial Design. As a researcher member of the IMG FH Mainz (Germany), he worked in collaboration with the IGD Fraunhofer institute on an

augmented reality project with human-computer interaction, involving informal and gestural user interfaces and computer-supported cooperative entertainment practices. Sergio continues to have a strong interest in user interface design and real-time systems.

Laura Polazzi (Researcher) studied communication sciences at Siena University (Italy) and was a researcher at the University of Liege (Belgium). She has participated in different research projects ranging from Co-operative work to educational technologies. From 1998 to 2001 she worked on the Pogo project, designing interactive tools to support children's storytelling.

Helen Raiano (Assistant to the Director) – Born in England from Italian parents, Helen graduated at Leeds University in 1984 and came to Italy for a one year internship at Olivetti. At the end of the internship, she worked for Olivetti in communications and marketing. Before joining Interaction Ivrea, she worked for Intesis (a Finmatica Group company), where she interfaced with foreign suppliers dealing in computer security systems.

Jan Raposa (Student) is an interactive media designer, whose work includes everything from graphic, print and web design, to video production, animation, multimedia, games and electronic music. As the experience director of the Parsek digital media company he was responsible for developing numerous award winning online and offline presentations, services and content integration systems.

Casey Reas (Associate Professor) recently obtained his M.S. degree in Media Arts and Sciences at the M.I.T. Media Laboratory. His research at the M.I.T. Media Lab's Aesthetics and Computation Group concentrated on interface design, information design, and computational kinetic sculpture.

The common thread in his work – which has been exhibited at the American Museum of the Moving Image, Ars Electronica, the Cooper Union, the New York Digital Salon, the Museum of Modern Art, Sega Joypolis, and Siggraph - is the study of dynamic reactive systems that receive and process input as a means of generating and altering visual compositions.

Before joining M.I.T., he worked as Design Director at leading web design companies in New York, including I/O 360 Digital Design, Rare Medium, Two Twelve Associates and Design/Writing/Research.

He studied design at the University of Cincinnati in the USA.

Chris Remie (Web Applications Developer) worked as a graphic designer, web designer, webmaster, software engineer and interface architect. In Amsterdam, he worked for Mediamatic Magazine, the Dutch Design Institute, and then moved to Washington DC to join OneSoft and Unibex. He was also involved in interface analysis, design and development for eCommerce and Business-to-Business Marketplace web applications.

Silvia Rollino (Communication Link and Student Support) has worked in advertising for almost 15 years as an all-round creative, producing campaigns as art director, copywriter and illustrator. After tackling disparate cultures and work environments in Germany, Switzerland, United States and England, she came back to Italy with a strong communication background and a problem-solving attitude. At Interaction Ivrea, she is in charge of student support, and also works as Admissions Officer and Communication Link.

Francesca Rosella (Student) has a B.A. in Fine Arts and a M.A. in Interior Architecture from the Istituto Europeo di Design (1997). She worked for major companies such as Valentino and Esprit De Corp. until last October and she is now launching her own company FRD-

Interactive. She loves to study people's behaviours and emotions to develop wearable computers related to communication, video gaming and entertainment.

Rikako Sakai (Student) received her B.A. degrees in Industrial design from the Tama Art University at Tokyo in 1993. Her research focused on a clarification of information elements and effects. In 1993, she joined Canon Inc. as an industrial designer. At Canon she has been involved in many stages of product development include human factor research, concept making, user observations, design and prototyping, usability testing, standardisation of UI and making design guidelines. She went back to school to expand her knowledge on user requirements and contextual use in different cultures.

Oscar Salazar (Student) received a B.A. degree in Social Communications from the University of Zulia in Venezuela and did master studies in Marketing. He then founded one of the first interactive media studios in Venezuela and also developed touch-based kiosks, CD-ROMS, training software and websites. During the last two years he worked on information architecture in content management systems within newspaper intranets. At Interaction Ivrea, he explores how interaction design can add value to business strategies during product development and after the product is released.

Nathan Shedroff (Member of the Explorers' Club) – An information and interface designer for over ten years, Nathan Shedroff is expert in the fields of information architecture, interaction design, and online and interactive media. Most recently, he has concentrated on building online solutions for businesses, specifically online branding, developing new types of online advertising, and customer-centred online products. He is also studying the viral nature of communication.

David Slocombe (Student) received his B.A. hons in Design Futures from the University of Wales College, Newport in 2000. This degree spans many areas of product interaction design within the context of social, cultural and political scenario creation. During this time Dave also worked as Head Product Designer for Roberts Technologies, designing and prototyping full scale working models of television and home entertainment systems. Since his graduation Dave has been working for Ragdoll Ltd as a Product Interaction Designer on projects for pre-school children.

Natasha Sopiaeva (Student) studied Linguistics and Philology at Turkmenistan State University (Ashgabad, Turkmenistan) for three years before she transferred to Hamilton College in upstate New York and graduated with a Computer Science degree. She worked as a freelance web designer in Portugal and as a Senior Web Designer at TMG Hypermedia in London before coming to Interaction Ivrea.

Ettore Sottsass (Member of the Explorers' Club) – The renowned designer and architect Ettore Sottsass is best known for his role in founding Memphis in 1981, which created an innovative vocabulary for 'New Design.' His career before this was also marked by a series of firsts – for example, in 1959 he designed the first Italian computer for Olivetti. He works with Sottsass Associati, the studio he founded in the 1980s, and his designs can be seen in museum collections worldwide.

Andrea Stabile (Communications Assistant) – After graduating in Public Relations, Andrea Stabile completed his civil service at Ivrea's town hall where he managed and developed communications projects. Before joining Interaction Ivrea, he developed promotional materials and advertising for a motor company and consulted for a New Jersey based start up company specialised in the import of Italian products.

Riccardo Stura (Junior System Manager)'s professional background in various companies made him an expert in project processing, installation, assistance and maintenance of local private or industrial networks. He cooperates with Silvio Valentino on the management, development and maintenance of all the information infrastructure of Interaction Ivrea.

Livia Sunesson (Student) received her B.A. in Interaction Design at Malmö University College 2001. Her final thesis described the process of designing an interactive instrument for autistic and disabled children. Livia's major interest right now is to further explore the subject of interaction design through prototyping with new technical and HCI skills.

Marco Susani (Member of the Explorers' Club) – An architect and industrial designer, Marco Susani has developed projects for the likes of Telecom Italia, Olivetti and Mediaset. For the European Union, he has headed research programmes in interaction and media design. He was Director of the Domus Academy Research Centre in Milan for several years, a partner of Sottsass Associati, and a consultant at Olivetti Design Studio. He recently joined Motorola in the USA, where he leads a newly established advanced concepts team.

Carlo Talamona (Technology and Facility Manager) - An architect by training, Carlo A. Talamona is a specialist in design and implementation of large-scale ICT systems, structural re-organisations and integration of multi-disciplinary teams.

At Interaction Ivrea, he is responsible for the design and implementation of information, communication and web technology, and set up the entire technological infrastructure, the security systems, and the teaching and research network.

He worked as a strategic consultant for many private and public companies and held strategic positions at the City and Province of Turin, all focused on urban planning and technological innovation.

Most recently he consulted the Housing Agency of the Province of Turin on the design and implementation of new information systems for about 35,000 residential dwellings.

As Director General of C.I.T. (a Turin agency of 16 municipalities coordinating the design of public works, urban planning, public housing and services), he planned and implemented a new Virtual Reality and Multimedia Park - a research centre focused on digital film production and audiovisual and multimedia services - and Turin's Multimedia Park, a training centre and research laboratory.

At Olivetti Information Services, he was Director of Public Business Development, Technical Director and Assistant to the President and CEO, and coordinated software and information services for public authorities. Prior to this, he was the Manager of Information Systems of the Piedmont Region and supervised the reporting of the Region to the European Community.

He has held a variety of board positions and in 1998, was awarded two Third Prizes in the International Architecture Competition of the Region of Piedmont for his work on the restoration of Turin's Royal Palace of Venaria and Borgo Castello in the Mandria Regional Park.

Jason Tester (Student) comes to Interaction Ivrea with a focus on socially beneficial interactive technologies, technologies that tangibly engage people in environmental, health, and humanitarian domains. Jason recently graduated from Stanford University with a B.S. in

Interaction Design. Through academic and industrial projects he has developed strong skills in user-centred design and rapid, iterative prototyping.

John Thackara (Member of the Steering Committee) – An expert on design and innovation, John Thackara is a director of Doors of Perception - the conference and knowledge network based in Amsterdam. Prior to this, he was the first director (1993-1999) of the Netherlands Design Institute. He is a member of the Virtual Platform, a body which advises the Dutch government on media cultural policy, and is Visiting Professor in computer-related design at the Royal College of Art in London. He is also an advisor to the Museum of Modern Art in New York on a major exhibition in 2001 on the future of work. In addition, John runs design scenario workshops for companies who wish to explore the consequences of the Internet for their business. John Thackara studied philosophy and journalism before working in publishing in London and New York. He edited Design for four years and was Modern Culture Editor of Harpers & Queen. During the 1980s, he set up and directed Design Analysis International (DAI), a consultancy and production company with offices in London and Tokyo. DAI organised conferences and exhibitions at the Pompidou Centre, Museum of Modern Art and Victoria and Albert Museum, among others. John Thackara has written policy studies for governments and companies and lectured in many countries. He has written for many European newspapers. Among his nine books is *Winners! How Successful Companies Innovate By Design*. He is currently working on a new publication, *The Edge Effect: Designing the Contexts of Innovation*.

Mack Thomas (Researcher) - Mack Thomas is an interactive designer from Texas, USA. His background includes both Psychology and Advertising. He works with the Mobile Embodiments research group, a team developing "nuove corporalia" for 3G mobile telephony.

Magnus Torstensson (Student) comes from Malmö, Sweden. For his undergraduate work Magnus studied Interaction Design at the School of Art & Communication (K3) at Malmö University College taking special interest in user oriented design, interactive sound and the merging of art and technology.

Silvio Valentino (System Manager) – For ten years, Silvio Valentino worked in the ICT sector of the Region of Piedmont. At Syntax Processing S.p.A., a company of the Olivetti Group (now Sema Group), he dealt with telecommunications and the central data processing system. Later on, he was in charge of the ICT department at Elea S.p.A. for six years.

Mark Vanderbeeken (Communications Manager) is a specialist in international communications, PR and marketing.

Most recently, he coordinated European communications for the freshwater programme of the World Wide Fund For Nature, based in Copenhagen, where he developed international campaigns, coordinated joint communications with the European Commission, and organised press conferences for the Brussels-based international press corps.

In New York, he managed the marketing department of the 80-person architecture firm Gwathmey Siegel & Associates and increased the number of proposal-based architectural commissions for the firm from 10 to 50% in three years time. Prior to that, he worked in New York as a press publicist for theatre and dance companies, including those of the renowned choreographers Merce Cunningham, Trisha Brown, and Bill T. Jones.

In Belgium, he was the chief press officer of Antwerp 93, European Capital of Culture, a 30 million euro arts festival.

He has degrees in visual and cognitive psychology from the Catholic University of Louvain, Belgium and Columbia University, New York.

Bill Verplank (Member of the Steering Committee) – An interaction designer, human-factors engineer and visiting scholar at Stanford University, Bill Verplank studied mechanical engineering and product design at Stanford between 1960 and 1965, returning there to teach ‘visual thinking’ with Robert McKim from 1971 to 1974. He obtained his PhD (in 1977) from MIT in man-machine systems with Thomas Sheridan. As a graduate student, he won MIT’s top teaching award, the Goodwin Medal; he also built kinetic sculpture at the Center for Advanced Visual Studies. At Xerox (1978-1986) he helped to test and refine the Xerox Star graphical user interface. For seven years, he taught tutorials at the ACM SIGCHI conference and participated in the development for ACM of curriculum recommendations. He worked as a design consultant with Bill Moggridge at IDTwo and Ideo (1986-1992) to bring graphical user-interfaces into the product design world. They coined the phrase ‘interaction design’ to denote what had previously been known as ‘user-interface design.’ At Interval Research (1992-2000), he directed research and design for collaboration, tangibility and music. During this period he worked at Stanford with Terry Winograd to establish a studio course on interaction design, which he then taught for five years. For the past two years, he has taught an experimental course on input devices.

Victor Vina (Researcher) - Originally trained as an Industrial Designer, he completed his studies at the Computer Related Design course at the Royal College of Art. His work is based on the creation of speculative information structures that manifest themselves both through virtual and physical interfaces. His project HyperSPC won the Third International Browserday and his work has been exhibited at the Institute of Contemporary Arts in London.

Terry Winograd (Member of the Explorers’ Club) – Professor of Computer Science at Stanford University, Terry Winograd has a particular interest in human computer design, with a focus on theoretical aspects and conceptual models. He is the director of the Stanford HCI Consortium, and is in charge of teaching programs in Human-Computer Interaction Design. He is a principal investigator of a project on interactive workspaces in conjunction with the Computer Graphics Laboratory, and of the Stanford Digital Libraries Project, in conjunction with the Stanford InfoLab. Winograd was a founding member and past president of Computer Professionals for Social Responsibility. He is on the national advisory board of the Association for Software Design and a number of journal editorial boards.

Marco Zanini (Member of the Steering Committee) – An architecture graduate of Florence University, Marco Zanini spent several years in the USA before returning to Milan to work as an assistant to Ettore Sottsass in 1977. He subsequently became a partner and managing director of Sottsass Associates. In 1981, he was one of the founder members of Memphis; he designed pieces for each of the group’s collections. In addition to exhibiting all over the world with the Memphis group, Marco Zanini also works independently, designing ceramics, jewellery, furniture and objects in blown glass. He has lectured on architecture and design in Japan, the USA, Australia, New Zealand, Colombia, Chile and Spain. He is also a founding member of the Milan-based cultural group, ABC. With Sottsass Associates, he has been design manager on many projects, including office furniture for Knoll International and retail stores for Esprit, as well as exhibitions, interiors and industrial products for a variety of international clients.

Jan-Christoph Zoels (Senior Associate Professor) – As Director of Information Architecture at Sapient, Jan-Christoph Zoels was responsible for strategic direction, creative scope and the integration of various aspects of the user experience. Projects there include websites for Harcourt, Goldman Sachs, Lucent and Cablevision, as well as application design for mobile devices (he was also the creative lead for the mobile practice of Sapient).



He was previously Senior Designer at Sony Design Center USA responsible for strategic product development. He developed concepts for Sony PDA, Electronic Music Distribution, and various interface designs for interactive TV and remote controls; and holds four patents and nine patents are pending.

He has Master Degrees in Industrial Design from the Rhode Island School of Design, Providence, USA, and the Academy for Art and Design in Berlin, Germany.

He has taught at Rhode Island School of Design, the Jan Van Eyck Academy (Maastricht, Netherlands), and Samsung's Innovative Design Laboratory (Seoul, Korea).