Fatih Kursat Ozenc

Application Package for Faculty and Research Positions
Carnegie Mellon University Pittsburgh PA, US
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Fatih Kursat Ozenc

Curriculum Vitae

PhD candidate in Design
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Research Interests

My research focuses on interactive products and service systems situated in transitional experiences. To address issues around role and environmental transitions, I develop an experience design framework called *modes of transitions*, which aims to help designers to understand and shape emotional and social qualities of people's relationships with interactive systems in the design process.

Education

PhD Candidate, Interaction Design, (Expected) May 2010
Carnegie Mellon University, School of Design, College of Fine Arts, Pittsburgh, U.S.

Master of Fine Arts, Visual Communication Design, July 2004
Sabanci University, Faculty of Arts and Social Sciences, Istanbul, Turkiye

Bachelor of Industrial Product Design, June 2002
Middle East Technical University, Faculty of Architecture, Ankara, Turkiye

Selected Grants

Cylab Carnegie Mellon, Graduate Fellowship, Pittsburgh, U.S., Sept 2008
Graduate Student Small Project Help (GUSH), Carnegie Mellon, U.S., February 2007
Carnegie Mellon Graduate Fellowship, Pittsburgh, U.S., May 2004
Sabanci University Graduate Fellowship, Sabanci University, Istanbul, Turkiye, June 2002

Research Projects

Saferide Alternative Ways of Commuting, Sept 2008 - Dec 2009
The motive of this project is to understand the drawbacks of mobility and adaptation, namely commuting, and to design a conceptual ridesharing service, which leverages technology to overcome obstacles that such services have traditionally encountered.

Exploratory Programming for Interactive Behaviors, June 2008 - April 2009
The motive of this project is to develop tools to enhance creativity in the designing of interactive behaviors

Reverse Alarm Clock Project, Jan 2005 - Sept 2008
The motive of this project is to situate ubiquitous computing at home domain, with a focus on adaptation. We have been looking at ways of improving the quality of morning activities of dual-income families with young children

Digital Self Project, Jan 2005 - May 2007
The motive behind this project is to design persuasive technology artifacts through understanding the social role transitions of freshmen students thorough their first semester in college

Research experience

Design researcher at Microsoft Research Cambridge
Interaction design for video-play project, Cambridge, UK, June-Aug 2007

Design researcher at Technical University of Eindhoven
Industrial design for Reverse Alarm Clock project, Eindhoven, Netherlands, June-Aug 2006

Interaction designer, Cylab Korea-Carnegie Mellon University
Interface design for a network security management software, Pittsburgh, U.S., June-Aug 2005

Design Researcher, USPS Postal Service redesign project
Information design for Carnegie Mellon University, Pittsburgh, U.S., Aug 2004 - June 2005

Teaching Experience

Designing For Experience, Instructor
School of Design, Human Computer Interaction Insitute,
Carnegie Mellon University, Pittsburgh, Spring 2008

Advanced Interaction and Interface Design, Co-Instructor with Jodi Forlizzi
School of Design, Human Computer Interaction Institute,
Carnegie Mellon University, Pittsburgh, Fall 2007

Sophomore 'Meaning of Form' Studio, Teaching Assistant
School of Design, Carnegie Mellon University, Pittsburgh, Spring 2007

Product design through movement Studio, Teaching Assistant
School of Design, Carnegie Mellon University, Pittsburgh, Spring 2006

Web-design studio, Teaching Assistant,
Visual Arts and Communication Design Departmen, Sabanci University, Istanbul, Turkiye, Fall 2003

Internships

Vestel Electronics, Research and Development Department
High-definition TV project, Manisa, Turkiye, Aug 2001

Meteksan Multimedia Company, 3D+Animation Department
3d modelling for simulation project, Ankara, Turkiye, July 2001

FIAT Tofas, Automobile Factory, Production Department
Technical Drawing Trainee, Bursa, Turkiye, Sept 2000

VITRA, Eczacibasi Sanitaryware Factory, Industrial Design Department
Washbasin design, Istanbul, Turkiye, July 2000

Workshops

Developing Interactive Behaviors Workshop II: Exploration of Future Generation Sketching Tools
Co-organizer with Miso Kim and John Zimmerman, Human Computer Interaction Institute, CMU, April 2009

Developing Interactive Behaviors Workshop I: Identifiying Actionable Dimensions of Interactive behaviors
Co-organizer with Miso Kim and John Zimmerman, Human Computer Interaction Institute, CMU, July 2008

Designing for Experience Workshop: Routine and Ritual construction
Co-organizer with Anne Mundell, School of Design, January 2008

Seminars & Presentations

Sustainability and Computer Science,
Why People Don't Want to Share Rides and What We Might Do To Change That?
Carnegie Mellon University, Pittsburgh, Pa, U.S., November 2009

Workshop on Real-Time Rides: A Smart Roadmap to Energy and Infrastructure Efficiency
Presenter, Massachusetts Institute of Technology in Cambridge, MA ,U.S., April 2009

Workshop at CHI 2009: Building a unified framework for the practice of Experience Design
Presenter, Cambridge, MA, U.S., April 2009

A Working Conference on Service Design, Interaction, and Social Environments,
Presenter, Case Western University, Cleveland, Ohio, U.S., March 2009

Workshop at CHI 2005: Social implications of Ubiquitous Computing
Presenter, Oregon, Portland, U.S., April 2005

Publications

[In preperation] An experience centered approach to the Ecology of Commuting: Research on Alternative Ways of Commuting, Fatih Kursat Ozenc, Lorrie Cranor, Jim Morris

[In preparation] How to support Designers in Getting hold of the Immaterial Material of Software, Fatih Kursat Ozenc, Miso Kim, John Zimmerman, Stephen Oney.

Transitions Research for Experience Design: Designing Interactive Products and services for Role and Environmental Transitions, Fatih Kursat Ozenc, IASDR 2009, Seoul, Korea

Reverse Alarm Clock: An interactive system, Artifacts session, EPIC 2009, Chicago, U.S.

New Methods for the Design of Products that Support Social Role Transitions, John Zimmerman, Kursat Ozenc, Jeong Bong-keum, 2008, Artifact. Taylor and Francis

Videoplay: Playful and Social editing of Video using Tangible Objects and Multi-touch Interaction, Stuart Taylor, Shahram Izadi, Kursat Ozenc, Richard Harper, 2nd IEEE Tabletop Workshop, October 2007, New Port, Rhode Island, U.S.

Reverse Alarm Clock: A research through design example of Designing for the Self, Kursat Ozenc, J Bongkeum, James Brommer, Nina Shih, Karen Au, John Zimmerman, Designing Pleasurable Products and Interfaces Conference, Aug 2007, Helsinki, Finland

Nurturing the Wakeup Routine, John Zimmerman, Kess Overbeeke, Jodi Forlizzi, Philip Ross, and Kursat Ozenc, Ubicomp 2006, Ubicomp Workshop on Nurturing Technologies in the Home, September 2006, New Port, U.S.

Exploring social relations between smart homes and their occupants, CHI 2005: Technology,safety, community, April 2005, Oregon, Portland, U.S.

Dynamics of Pleasure in Interface Design, 4th International Conference on Design&Emotion, Middle East Technical University, July 2004, Ankara, Turkiye

Intertwining Nature of Virtual Reality, M.F.A. Thesis Paper, Sabanci University, Faculty of Arts and Social Sciences, June 2004, Istanbul, Turkiye

Research statement

Fatih Kursat Ozenc

My research investigates the role technology plays in people's relationships with their environment. In particular, I focus on how advances in computation and electronics have blurred the boundaries between contexts and between the roles people enact, fragmenting experiences. This problem has not been considered explicitly among the experience design community, and, ironically, interactive products, which are dynamic by nature, have been designed according to the static character traits of people or the environment. In my thesis, I formed a framework for understanding and enhancing the emotional and social qualities of people's relationships and experiences, through designing, building, and evaluating interactive products and services.

My thesis centers on how people adapt themselves within changing and unchanging contexts, such as in transitions, including the move between environments or from one role to another. By helping designers grasp and act on the dynamism and intangibility of the transition phenomena, they can, in turn, assist people in composing more wholesome, emotional, and social experiences. At a high level, the elements of my framework, titled the 'modes of transitions' [Ozenc,2009], include routine, performance, narrative, and ritual, which addresses the material, manner, function, and form of an experience, respectively. The designer works with performance and routine to design the frame of the product, while people give flesh and soul to the experience, building their own narrative and rituals. Following an interdisciplinary approach, integrating drama, computer science, and social psychology through design thinking, my work advances the design disciplines in three ways: 1) Understanding the abstract and intangible nature of actions in people's transitions, 2) Providing methods of designing products and services (e.g., giving form to the actions), and 3) Evaluating these products and services by their contribution to the quality of life.

Projects

In my projects, I merge theory-driven research [Sarbin, Goffman] and research-through-design [Schon] to lead my inquiry. With this composition of understanding and action, I led teams of graduate and undergraduate students, engaging them in the research process of designing, building, and evaluation. The research-through-design mindset has given me flexibility and openness to students' reflecting in and on the process, which also helped me to refine and iterate on my hypotheses. Some of my projects include:

Saferide

This project addresses a mobility issue of stress occurring during the daily commutes, and an adaptation issue of switching roles from a solo driver to a ride-sharer [Ozenc et al., 2009]. The goal is to understand both the positive and negative aspects of commuting, and to design a new ride-sharing service that facilitates transitions between contexts. The strength of the 'modes of transitions' framework is in its capability to bridge the gap between the understanding of the problem and being able to act on (i.e., design for) the problem. By providing frames for composing their routines, performances, and rituals, this project exemplifies how products can help people develop strategies and interventions to support their transitions.

Reverse Alarm Clock (RAC)

This project addresses an adaptation problem, where stress and decrease in felt-life qualities occur during the morning rush in dual-income families with young children [Ozenc et al 2007]. The RAC explores the role interactive products play in the construction of routines and rituals. Specifically, by placing interactions within intimate bedtime rituals, it creates an opportunity for the parent and child to connect with each other through interactions with the clock. The RAC project embodies and prioritizes a research-through-design process where students use design and low-level prototyping as a means of research. I conducted field trials with working prototypes (built using the Arduino microprocessor), and placed the RAC into the homes of families with young children. Results showed that the RAC met the functional need of keeping young children in bed, and also gave new insights into how the clock not only affects role transitions of the parent between home and work, but also transitions of the child from co-sleeping to independent sleeping. The RAC has been received well by the media, appearing in the Associated Press, Business Week, Science Daily, Centre Daily, Engadget, CNET, WTAE TV, Spirit magazine, and various technology related blogs.

Goffman, E. (1967) Interaction Rituals: Essays on Face-to-Face behavior, Pantheon Books, New York.

Ozenc,F.,K., (2009) Transitions Research for Experience Design:Designing Interactive Products and services for Role and Environmental Transitions, IASDR 2009, Seoul, Korea

Sarbin, T.R.,(1984) Role Transition as Social Drama Role Transitions: Explorations and Explanations, Plenum Publishing Corporation

Schon, D. (1983) The reflective practitioner: how professionals think in action Basic Books

[In preperation] Ozenc et al (2009) An experience centered approach to the Ecology of Commuting: Research on Alternative Ways of Commuting

Ozenc et al (2007) Reverse Alarm Clock: A research through design example of Designing for the Self, Designing PleasurableProducts and Interfaces Conference

Digital Selves

This project addresses a habituation problem of stress and struggle experienced by first-year college students in the process of transitioning from high-school to college. Following a theory-driven research process, I co-developed new human-centered design methods, including transition personas, using social science theories, that helps designers capture the transition stages of the individual in depth [Zimmerman et al. 2008]. We tracked participants over their first semester in college, including weekly screen captures of students' 'digital selves' (such as their blogs, photo blogs, online diaries, personal web pages, and social networking pages), and monthly interviews about their use of social networking software and their perception of how they had changed since starting college. Through these probes and interviews, I observed that participants use products and services as a means of constructing their routines and rituals, performing new freshmen roles, and composing narratives referring to products. This observation allowed me to discover the key role of products and services during the transitions, and also a need for understanding and designing for transitions.

Future Work

In the future, I would like to inquire further into the variations of transitions in people's experiences, particularly regarding design research and its social implications.

Designing Interactive Products and Services for the Quality of Life and Well-being

One of my research focuses will be exploring interactive products and services that enhance people's quality of life and well-being. I am interested in the themes of 'interaction' and 'participation' within the intersections of 'communication', 'care', and 'community'. For example, services of care are critical in terms of life-stage transitions, such as a psychiatry service designed for people who have experienced a traumatic loss, illness, or migration. The nature of such a service requires a comprehensive understanding of transitions, where the 'modes of transitions' framework can bring a fresh design perspective to this area. By situating services of care in a design context, I can facilitate collaborations between designers, policy-makers, health-care, and social support groups to better address people's needs.

Developing Methods for Design Process

One of the challenges in service and interaction design is the temporal quality that is hard to grasp, such as social relationships that are intangible and need to be observed over a long term. I am interested in developing design methods (e.g., heuristics, conception, development, and evaluation) that help practitioners approach the transitions phenomena. For example, current service design methods focus on assessing the efficiency of services, but neglecting their emotional and social aspects. This is particularly problematic in transition services involving social capital among its participants. I would like to address human values and emotions explicitly, which will in return enhance these types of products.

Developing a Theory of Social Aesthetics in Design

The social qualities of an experience, while being equally important to the self's experiential qualities, have not been given the same emphasis. Defined by Berleant as the aesthetics of the situation, composed of experiential qualities, such as reciprocity, continuity, engagement, and multiplicity [Berleant], social aesthetics can help ground the growth of social qualities explicitly. My research will look at the key qualities of social aesthetics, and how to transform those qualities into actionable principles for designers. For example, I would like to explore aesthetic qualities of a social community that might shape the design of public services.

To pursue these goals, I will initiate collaborations among faculty and research institutions, actively engage in conference venues, including human-computer interaction (CHI, mobile HCI, Ubiqutious computing, Interact) and design conferences (Design&Emotion, DPPI, IASDR, DRS), submitting my work in interdisciplinary journals with design and social science focuses (Artifact, Design Studies, Design Issues, Personal Ubiqutious Computing, Journal of Environmental Psychology), and disseminating my work through online medium (blogs and journals).

Zimmerman, J.,Ozenc, K., Jeong , B.,(2008) New Methods for the Design of Products that Support Social Role Transitions, Artifact, Taylor and Francis

Berleant, A.(2005) Aesthetics and Environment, Variations on a theme Ashgate Publishing Company

Teaching statement

Fatih Kursat Ozenc

During my doctoral degree at Carnegie Mellon, I have developed and taught my own course, as well as co-teaching and assisting industrial and interaction design courses at both undergraduate and graduate levels. For me, teaching has become a learning experience by itself, where I can reflect on my own research problems. It keeps me alive with the always-fresh minds of students, and one of the greatest pleasures of my career is to see a humorous idea or inspiring solution developed by my students.

As an art of making, learning in the design fields (e.g., human computer interaction, computer mediated communication) means learning by doing, which differs from craftsmanship by its conceptual depth that the designer builds gradually. An interaction designer needs to be a quick and life-long learner, since the subject matter of design changes from problem to problem. By observing that the subject matter is transitioning from physicality (in the object itself) to experience (in the people using the product), I aim to help students to conceptualize and plan "experience" by following a dramatist teaching philosophy, making use of drama techniques such as body storming, role-playing, and experience prototyping so that students learn by performing.

For me, informed intuition, experimentation, and critical thinking are those I value the most in teaching design. Intuition is not by chance, the design student strives for it. S/he needs to observe the subject matter from different perspectives, make intensive research through academic papers and state-of-the-art examples, and experiment with material, form, and interaction. While informed intuition and experimentation help the designer in developing ideas, critical thinking refines those ideas. This process is then iterated to transform the problematic situation into its preferred state (Simon). Together, informed intuition, experimentation, and critical thinking will lead the student in developing his/her unique "design thinking". Class atmosphere is also as important as the developmental process. The instructor should develop a nurturing environment where students are motivated to become involved in the coursework, for example, by one-to-one or teamwork interaction.

With these insights shaped by working with excellent mentors and blended with my own interpretations, the courses I taught at Carnegie Mellon include:

- Designing for Experience is a project-based interaction design course I developed from scratch. The course is structured around research-intensive projects where students work on problems situated in the home, in mobile communications, and in social networks. They develop interactive systems that convey their ideas through physical and digital prototypes. The course also consists of two workshops, in collaboration with Professor Anne Mundell from the School of Drama, where we study the drama techniques of ritual construction, narrative thinking, and performance, parallel to the conceptualization phase in the design process.

- Advanced Interface and Interaction Design (AIID) is an interaction design course I co-taught with Professor Jodi Forlizzi. This course aims to explore different modalities, such as speech, visual, and haptic interfaces, within a broad set of projects situated in various domains. Each project presents an analytical tool, including typology, mood-board, and persona building, for the students to explore their subject matter. In this course, I developed two projects on mobile communications and home domains. The mobile communications project focuses on tangible interaction, where I supervised students in exploring interactions by using the formal means of the subject matter. In the home project, I introduced the concepts of routine and ritual and asked students to design artifacts that help people construct or maintain their routines and rituals.

- Sophomore Design Studio is a product design studio I taught as a teaching assistant with Professor Bruce Hanington. In this course, students explore formal means of subject matter and gradually enter into the issues that require consideration of context. In the brand identity project, students composed visual forms rooted in an existing brand. I helped students develop a visual language in harmony with their concepts, where my background in visual communication was able to assist them to elaborate on their ideas. In another project, students reinterpreted the form of an existing product in a new context. I encouraged them to sketch out new contexts by experimenting with routines and composing alternative narratives. This course, in return, taught me how to introduce context and issues around contextual design.

During my research work at Carnegie Mellon, I have also advised masters and undergraduate students, engaging them in research projects and making the hands-on research as part of their learning experience. In Reverse Alarm Clock project, I led a team of Human-Computer Interaction (HCI) and Interaction Design masters students in the design and evaluation of an interactive system. In the Digital Selves project, I co-lead a team of undergraduate students, in designing and conducting of a longitidunal research study (diary logs, interviews), with the motive of understanding the role of products and technology in their transitioning from high school to college. I have also given tutorials and seminars in the campus community on a wide range of topics, including visual communication design to music majors and the sustainability seminars at Computer science department.

Given my background in design and interdisciplinary research experience, I am confident about teaching both theoretical and practical courses. In theory track, I can teach courses focusing on design thinking, research methods in design and human computer interaction, character of technology, social aesthetics, design history. For me, theory in design and human computer interaction should also be practical, so I would like to create small projects where students can express or reflect on theories by embodying an abstract idea in the designed piece. I will also follow a pluralistic approach where students can discuss views from different schools of thought to find their own perspective. In practice track, I can teach courses on research and design process, studio courses for designing and evaluating interactive services and systems, and basics of human computer interaction, visual communication design, industrial product design.

I am also eager to develop non-traditional classes, merging theory and studio tracks in emerging applications such as ubiqutious, social computing, or use my experience with 'transitions research' to develop project courses on persuasive technologies. Should I become a part of the faculty in your department, I will contribute to the diversity of classes offered to the students and develop new classes to adapt to the changes in interaction design and human computer interaction.