

CHI 2010 Workshop

Videogames as Research Instruments

9.10am – 10:00am: **Getting to Know
Each Other**

5 minutes for each paper (Slides 1 & 2)

Paper 1

Ethical Aspects of Video Game Experiments

Carson Reynolds

連絡先

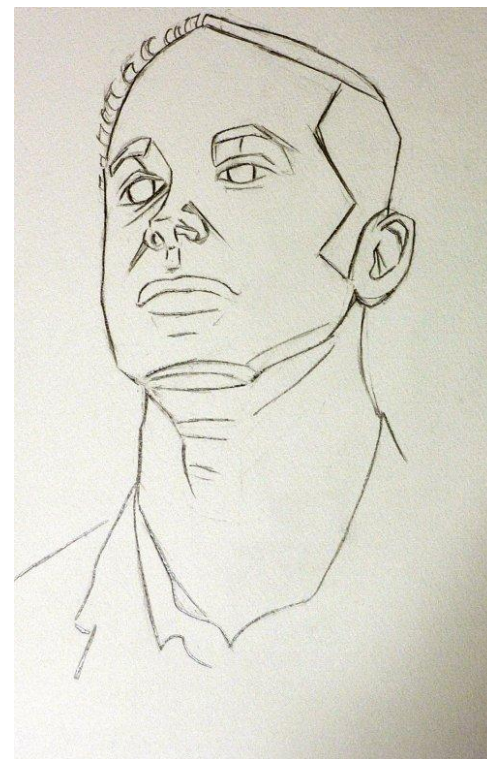
Carson Reynolds

Affiliation:

Project Assistant Professor
Department of Creative Informatics
Graduate School of Information Science and
Technology
University of Tokyo

Areas of Expertise:

ethics
privacy
sensors
affective video games
devices that alter perception



Twitter:

@CarsonReynolds

Ethical Aspects of Video Game Experiments

Carson Reynolds, Susanna Hertrich,
Alvaro Cassinelli, and Masatoshi Ishikawa (University of Tokyo)
Marshall Smith (University of Colorado)

- A system which communicated facial expressions and physiological information was viewed in a different light when used in a poker-like game and job-interview tasks (Reynolds, 2005).

- Famous ethically challenging experiments:

Tuskegee Syphilis Study (Thomas & Quinn, 1991)

Science Club Breakfasts (Buchanan, 1996)

Fruit Machine (Sawatsky, 1981)

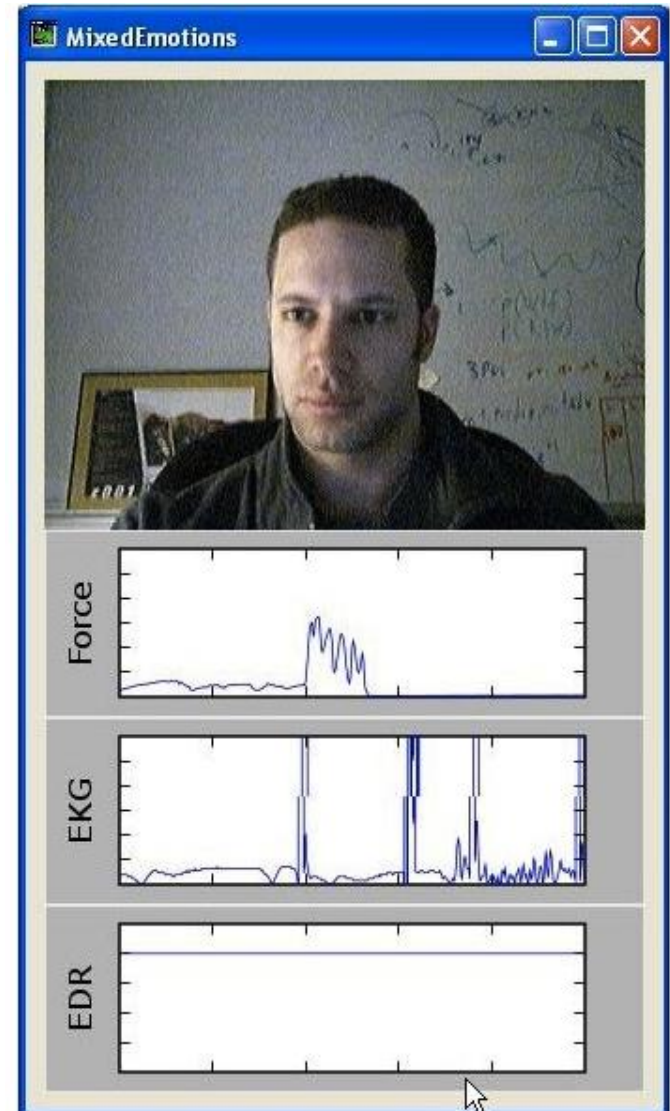
- A brief history of ethically challenging game-like experiments:

Russian Roulette (19th Century Tsarist Russia)

Obedience to Authority (Milgram, 1961)

Stanford Prison Experiment (Zimbardo, 1971)

Virtual Reprise of Milgram (Slater et al., 2006)



Paper 2

Wii Science: Teaching the laws of nature with physically engaging video game technologies

Martin Jonsson & Zeynep Ahmed

Wii Science - Teaching the laws of nature with physically engaging video game technologies



Martin Jonsson, Senior Lecturer in Media Technology, Södertörn University, Sweden

PhD in Computer Science

Research interests:

Novel interaction forms, embodied and tangible interaction, sensor based systems, context aware and ubiquitous computing

Wii Science - Teaching the laws of nature with physically engaging video game technologies



Zeynep Ahmet, Södertörn University & Mobile Life Center,
Sweden

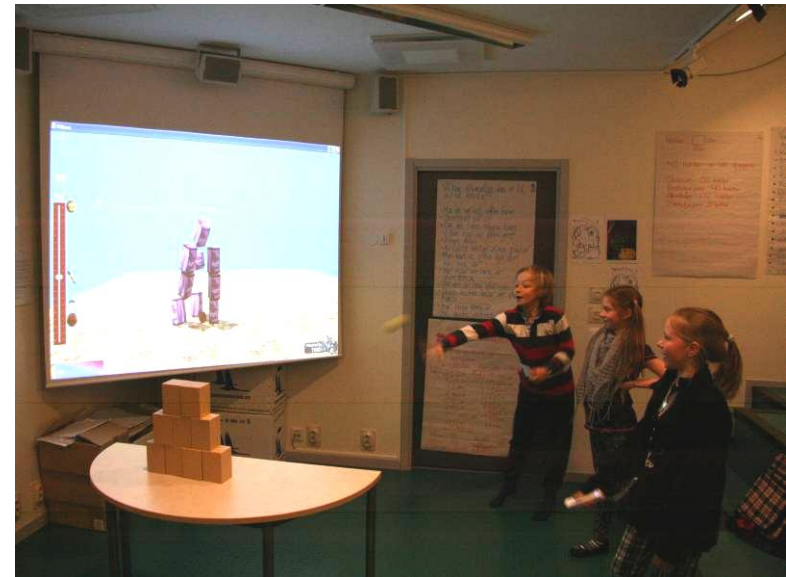
B.Sc. in Computer Science and Interaction Design

Research interests:

Mobile services, social networks, design processes and innovation

Wii Science - Teaching the laws of nature with physically engaging video game technologies

- How can sensor based computer game controllers be used in education? E.g. in order to learn about natural laws and physics
- How can this technology be used to support alternative (kinesthetic) learning styles?
- Example: Study about gravity



Paper 3

Game-Based Self Service Technologies

Yolanda Rankin

Game-Based Self Service Technologies



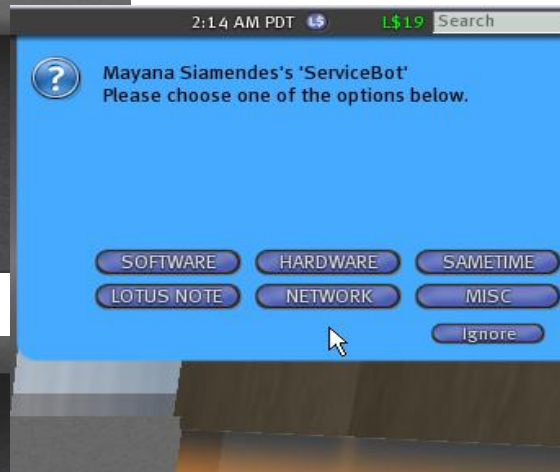
Authors

- Yolanda A. Rankin
- Jakita O. Thomas
 - IBM Research – Almaden
 - Services Research

My Expertise

- MMOGs as Second Language Acquisition tools
 - Vocabulary acquisition
 - Reading comprehension
 - Conversational fluency
 - Collaborative problem solving
- Service Design & Innovation
 - Modeling B2B Service Systems
 - Self Service Technologies
 - Games for Information Gathering & Knowledge Acquisition

Concept of Virtual Customer Support Center



Collaborative Artifacts

- Display board of information
- ServiceBots similar to NPCs
- File cabinet as 24/7 repository
- Social space for meeting CSRs & other customers

Paper 4

GameE in action: Using the GameE paradigm as a tool for investigating human emotions

Suleman Shahid

GameE in action

- Background:
 - Computer science (M.Sc.) and Interaction design (PDEng)
- Current research
 - Emotions in HCI
 - Inducing emotions (naturally) for training affective systems
 - Affective system design
 - From the social/cultural psychology perspective
- Tilburg centre for Creative Computing (the Netherlands)
 - Department of Communication and Information Sciences



GameE in Action

- Games under GamE Paradigm
 - Guess the number
 - Word Matching
 - Affective laughing mirror
 - Guess Who
 - Show it (variation of Bop it): Show the right emotion
- Outcome of each game is controllable
- Related Experiments
 - Game playing children across cultures
 - Effect of age, culture,
 - Effect of social presence (Alone, together with their friend, together with a robot, physically apart, ...)
 - Game playing adults



Paper 5

*Planning a Cosmopolis: Key Features of an
MMOG for Social Science Research*

Peter Landwehr

Planning a *Cosmopolis*

Four key features of an MMO for social science research

Peter Landwehr, Marc Spraragen,
Balki Ranganathan, Kathleen M.
Carley, Michael Zyda

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{spraragen | brangana | zyda}@usc.edu

Personal background

- Third year grad student
- Member of CASOS
 - Specializes in agent-based modeling & dynamic network analysis
 - 30ish researchers & programmers in the center
- Research in both games & network analysis.
 - Previous work with text in WoW.
- USC Collaborators: The Gamepipe lab
 - Game designers & engineers.

Cosmopolis & our four principles



An MMO with an outer game conceived around city construction, a growing set of subgames determined by researchers and game designers, and an accessible database of player information.

- A foundation in theory (Dynamic Network Analysis)
- Event-based interaction logging / Tool connector
- Isolatable experiment frames
- Large-scale in-game events

Paper 6

*The Eyes Have It: Measuring Spatial Orientation
in Virtual Worlds to Explain Gender Differences
in Real Ones*

Suzanne de Castell, Jen Jenson



- Suzanne de Castell, Professor: Education, New Media, Game Studies
- *Previously:* Philosophically trained conceptual analyst and theorist and early leader in studies of social and educational uses of new technologies.
- Extensive gender/technology research
- Conducted studies in formal, non-formal and online environments
- Online game design/development/research over last 10 years
- *Currently:* Lab based gamer studies supplemented by public site studies
- Study subject variation across age/skill/context/location/ethnicity
- Build mixed-method trans-disciplinary research inter-relating socio-cultural theory and psycho-physiological data



- Jennifer Jenson, Associate Professor, Pedagogy and Technology, York University
 - Gender and gameplay studies (most recent publication in *Simulation and Gaming*, “Gender and Gameplay Review of Research” (2010) w/ S. de Castell
 - Qualitative, ethnographic work on gender and technology last 15 years
 - Game design and development of educationally focused digital games
 - Co-Editor of *Loading... : A Journal of the Canadian Game Studies Association*
 - Current work:
 - Exploring the relationship between novice status and conflation of gender in Virtual Worlds/Games
 - Qualitative and Quantitative data collection on Virtual World players (survey, lab play sessions, and internet café informants)
 - Designing a music based flash game, based on previous game design and development

The Eyes have it: Measuring Spatial Orientation in Virtual Worlds to explain gender differences in real ones

Game-based VW experiments using video and eye tracking:

1. to see whether (and if so, how) gender differences in real world contexts manifest themselves in virtual environments;
2. to help measure gender differences in spatial mobility and spatial ability;
3. to help adjudicate between biological and socio-cultural explanations for reported gender differences in spatial ability.



Paper 7

Study of User-Created Interfaces in Video Games

Sean Targett

Profile: Sean Targett

- From Regina, Saskatchewan, Canada
- Graduated with a BSc in Computer Science from the University of Regina in 2005
- Currently Working on MSc in Computer Science under the Supervision of Dr. Daryl Hepting and Dr. Howard Hamilton
- Research Focus: user interface design with a focus on user created interface content
- Web Developer with Service Canada working on the EI/CPP webpages



Overview of Paper

- User Generated Content is latest craze in games and WoW is one of the first times we have seen this trend make the jump to interface creation
- People grow up being told that everyone is unique and special. (Special Snowflake Syndrome) So it follows that everyone has a different idea of what they are looking for in a UI.
- Research focused on the how and why people used and created interface modifications to understand their motivations and the effect that user created interfaces have had on the game and it's community



Paper 8

*Video Games as Research Stimuli to Study New
Ways to Assess User Experience*

Marco Pasch



PhD Student and RA at Univ. of
Lugano, Switzerland

Working on new ways to assess the
user experience

MSc in Human Media Interaction
Diploma in Media System Design

Naturalistic Setting

Video Games
as Stimulus

Use of Physical
Objects



Eduardo Calvillo

CHI Workshop Chair

Program Chair of the 2010 Mexican HCI Conference (MexIHC).

Teaching this term: Creativity for Information Technology and Telematic Engineers & Information Systems for Management & Business.

My [PhD Thesis](#) has been published as a book.

"[Assessing the Core Elements of the Gaming Experience](#)" to be published in the book "[Evaluating User Experience in Games](#)" by Springer-Verlag, and edited by [Regina Bernhaupt](#).

About my research interests

I am a researcher interested in the interaction between humans and technology.

My main research interests are user experience, input devices and video games.

In previous projects I have worked on evaluating, and identifying, the user experience for video games.

Been involved in projects for defining the relationship between business and technology.

Explored the role of governments in establishing policies to foster technological development in a third world country.



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Universidad Politécnica de San Luis Potosí, *San Luis Potosí, SLP, México*

Dr. Jonathan Back



Workshop Organiser

Researcher @



University College London Interaction Centre

Researcher Co-investigator on CHI+MED

To 'err' is human

I wish to further develop an understanding of human error associated with the use of interactive medical devices.

My research builds on:

- (1) aggregated knowledge of **resilience** across safety-critical domains;
- (2) identification of workarounds that are developed to avoid **error**;
- (3) findings of controlled experiments, which enable systematic patterns of error to be **predicted**.

Interaction design that better supports the cognitive capabilities of individuals and small teams facilitates the avoidance, detection, and recovery of human error.

Latest News

The CHI+MED programme grant begins in October (2009) and runs for 6 years @ UCLIC - Swansea - Queen Mary.

Multidisciplinary **Computer-Human Interaction** research for the design and safe use of interactive **medical** devices.

j.back@ucl.ac.uk

Eddie Capstick



Workshop Organiser

Researcher @ **UCLiC**

University College London Interaction Centre

Msc Human Computer Interaction & Ergonomics

New media consultancy (e-business lecturer)

Floated (UK's 1st) ebusiness solutions company

Virtual Reality Lab

PhD Research: Measuring and Defining Immersion in video games. Looking at the social side of multiplayer games (which includes addiction).