CREATIVIDAD COMPUTACIONAL
80. Coloquio 2013

MIT
Dr. Nick Montfort,
Dr. Fox Harrell
Dra. Sneha Veeragoudar

UAM
Cuajimalpa
Grupo Interdisciplinario
en Creatividad Computacional

UNAM
Posgrado en Ciencia e Ingeniería
de la Computación

14 de noviembre: UAM Cuajimalpa
15 de noviembre: IIMAS, UNAM

www.rafaelperezyperez.com/coloquio
PROGRAMA
8o Coloquio Internacional en Creatividad Computacional
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14 de noviembre de 2013
Sede: UAM Cuajimalpa (Casa del Tiempo)
(habrá traducción simultánea)

10:00 Inauguración

10:15 Creatividad Computacional e Interdisciplina en la UAM Cuajimalpa
Grupo interdisciplinario en Creatividad Computacional

11:00 Expressive Outcomes of the Imagination, Computation, and Expression Laboratory
Fox Harrell

12:00 Literary Models
Nick Montfort

13:00 STEM->STEAM: Embodiment, Refugees, and Rivers
Sneha Veeragoudar Harrell

15 de noviembre de 2103
Sede: Auditorio del IIMAS, Ciudad Universitaria

9:30 Creatividad Computacional en el posgrado en CIC-UNAM
Grupo Interdisciplinario en Creatividad Computacional

10:00 Computational Creativity for Expression and Empowerment: The Case of Fractal Village
Sneha Veeragoudar Harrell

11:00 Scaling Up Literary Models with Curveship and Slant
Nick Montfort

12:00 A Phantasmal Media Approach to Computational Creativity
Fox Harrell
Resúmenes (en inglés)

14 de noviembre 2013

"Literary Models"
Nick Montfort

I will show examples, from my own work and the work of others, of how computation, theories from the humanities, and artistic practices have been combined. Just as an architect may build a model of a building out of wood, and just as an economist might model an economy using a computer, it is possible to build models of how we write, of poetic and narrative composition. It can be easy to get started if we focus on specific aspects of literary creativity, and if we (like the economist) use computers to build our models. In the best cases, building and running these models allows us to learn something about computation as well as about literature, and, in addition to offering research insights, can provide a result that has aesthetic value. My focus will be on small-scale models and on explaining the idea behind this approach through a variety of examples. I will describe some research implications of these after I share the group of them in a literary presentation, as if at a poetry reading.

“Expressive Outcomes of the Imagination, Computation, and Expression Laboratory”
Fox Harrell

The Imagination, Computation, and Expression Laboratory (ICE Lab) researches and develops new forms of interactive narrative, gaming, social media, software art, and, most importantly, creative computing forms unanticipated by any of those. This talk presents several of the systems developed by the ICE lab, highlighting the roles of arts, aesthetics, and culture in the work. Several of these systems include: Mimesis, a game exploring the phenomenon of social discrimination aiming to provide users with insight into the nature and effects of covert forms of discrimination by presenting the user with conversational encounters in which microaggressions occur; the Gestural Narrative Interactive Expression (GeNIE) Project, which resulted in the open-source GeNIE platform that allows authors to create and better understand culturally salient, effective, gesture-driven interactive stories for multi-touchscreen devices; and Chimeria, a system to help people better understand social categorization phenomena such as marginalization and the dynamics of group membership through an interactive narrative.

http://www.rafaelperezyperez.com/coloquio
“STEM->STEAM: Embodiment, Refugees, and Rivers”
Sneha Veeragoudar Harrell

In this two-pronged talk Sneha Veeragoudar Harrell provides examples and reflection upon student creativity resulting from her pedagogical work seeking to foster computational literacy in groups currently marginalized in science, technology, engineering, and mathematics (STEM) education. The first part of the talk features examples of creative computational student-generated artifacts from a year-long critical ethnography she conducted at a small school for recently resettled female refugee adolescents. These youths hail from a range of countries including, but not limited to, Afghanistan, Burma, Eritrea, Iran, Iraq, Kenya, Somalia, Sudan, Tanzania, and Zimbabwe. The study centers around two month-long computational agency development intervention that included a series of semi-structured clinical interviews, field trips, and public presentations. In the second part of the talk, Veeragoudar Harrell steps back to more broadly explore the importance of, and the tensions within, relations between embodiment, STEM education, and learning. She concludes with synthesizing reflections on creativity and the challenges in exploring the unmapped territory of fostering transformative computer-based learning experiences for marginalized youth.

15 de noviembre 2013

"Scaling Up Literary Models with Curveship and Slant"
Nick Montfort

This talk continues my discussion of the concept of literary modeling, this time looking at larger-scale systems with sophisticated implementations of poetic and narrative ideas. I first describe Curveship, my interactive fiction system with support for narrative variation -- representing the same events in different ways. Then, I describe a recently-started collaboration with Prof. Rafael Pérez y Pérez and Prof. Fox Harrell, the blackboard system for collaborative writing called Slant. While particular aspects of literary creativity can sometimes be modeled quickly to good effect, larger-scale systems allow us to investigate how these aspects work together. Such systems can also produce powerful aesthetic effects by combining different literary techniques.

http://www.rafaelperezyperez.com/coloquio
“A Phantasmal Media Approach to Computational Creativity”
Fox Harrell

In his recent book Phantasmal Media: An Approach to Imagination, Computation, and Expression (MIT Press, 2013), D. Fox Harrell considers the expressive power of computational media. He argues that the great expressive potential of computational media comes from the ability to construct and reveal phantasms—blends of cultural ideas and sensory imagination. These ubiquitous and often-unseen phantasms—cognitive phenomena that include sense of self, metaphors, social categories, narrative, and poetic thinking— influence almost all our everyday experiences. Harrell offers an approach for understanding and designing computational systems—ranging from social media and e-commerce sites to videogames and computer-based artworks—that have the power to evoke these phantasms, paying special attention to the exposure of oppressive phantasms and the creation of empowering ones. He argues for the importance of cultural content, diverse worldviews, and social values in computing. The expressive power of phantasms is not purely aesthetic, he contends; phantasmal media can express and construct the types of meaning central to the human condition. In this talk Harrell presents his concept of phantasmal media as an approach to computational creativity.

“Computational Creativity for Expression and Empowerment: The Case of Fractal Village”
Sneha Veeragoudar Harrell

In the USA, women and many ethnic minority groups are underrepresented in Science, Technology, Engineering, and Mathematics (STEM) professions. Amidst the failure of federal responses, e.g., No Child Left Behind, to reach students by operating at the school level, my work explores the viability of a campaign to reach each individual student and mobilize and empower them as agents in their own STEM learning. At an alternative high school serving predominantly marginalized students evicted from mainstream education, I implemented Fractal Village, a critical/computational/constructionist-pedagogy (C3) learning environment of my design. Fractal Village, instantiated in the virtual-world "Second Life," constituted an empirical environment to research my emergent model of computational agency as well as an intervention aiming to foster such agency. Key research objectives were to: (1) study relations amongst cognitive, affective, material, technological, and social factors that would contribute to individual development of computational agency and (2) delineate design principles for fostering computational agency. I argue that to build agency, students must develop skills and dispositions. We can, and must, engage marginalized youth by helping them to build STEM identities, engaging their a priori computational agency, and customizing skills and dispositions-related classroom discursive supports.