

Upcoming Events

- September 1:
University Holiday
- September 10:
HCI Supervisory Committee Meeting
- Every Friday:
HCI Seminar
12:10-1 pm in
Room 20 Howe

Inside this
issue:

Summer 08 Graduates	2
New Curriculum	3
SPIRE-EIT	4
Kofi Whitney	5
New HCI Faculty	5
Online MS	6
HCI Seminar Lecture Series	6
HCI Student Group Officers	7
Publications & Conferences	7
HCI Supervisory Committee	8

Welcome New HCI Students

Thirteen students have been admitted to the HCI Graduate Program for the Fall 2008 semester.

Dan O'Brien will be working with **Brian Steward** in ABE on his PhD. Dan earned his BS in MIS from ISU in 2003 and his MBA from the University of Iowa in 2008. He currently works for Wells Fargo in Des Moines.

Peter Schmidt will be working with **Brian Mennecke** in LOMIS on his PhD. Peter earned his BA in Mass Communications in 1991 from Drake University and his MS in MIS in 2004 from Friends University. He currently works for the US Army.

Shayne Narjes is an instructor at South Central College. Shayne earned his BS in Industrial Psychology in 1993 from Minnesota State University and his MBA from the University of St. Thomas in 2003. He will be working with **Tony Townsend** in LOMIS on his PhD.

Andrea Peer will be working with **Sree Nilakanta** in LOMIS on her PhD. Andrea earned her BS in Mechanical Engineering from the US Merchant Marine Academy in 2001 and her MS in Organization and Management in 2004 from Antioch New England Graduate School.

Michael Van Waardhuizen will be working with **Jim Oliver** on his MS. He earned his BS in Electrical and Computer Engineering in 2003 from ISU. He worked at Wisconsin Public Power before coming back to ISU this fall.

Ross Bohner will be working with **Nir Keren** on his MS. Ross earned his BS in Computer Science in 2004 from the University of Northern Iowa. He recently worked for Rockwell Collins.

Paul Mangiamele will be working with **Lisa Nolan** on his MS. Paul earned his BS in MIS from ISU in 2008.

Jim Koopman has been admitted to the Online MS program. He earned his BS in Management in 2008 from ISU.

Steven Campbell has been admitted to the Online MS program. Steven is from Washington D.C.

Stanley Morris has been admitted to the Online MS program. Stanley works for McAfee, Inc in Plano, TX. Stanley recently completed the HCI Graduate Certificate program.

James Bumpus has been admitted to the HCI Graduate Certificate program. He works for Epic Systems in Madison, WI.

Ben Davis has been admitted to the HCI Graduate Certificate Program. He recently graduated with a BS in Psychology from ISU and is in the military.

Enanga Fale has been admitted to the HCI Graduate Certificate Program. She is employed at Rockwell Collins in Cedar Rapids.

GRADUATING in Fall 2008?

Please contact Pam Shill if you plan to graduate in the Fall 2008. By doing this, you will be included on an email list to receive important graduation information, including deadlines for submittal of forms to the Graduate

Summer 2008 HCI Graduates

Three HCI students graduated with their HCI degrees this summer. All three students worked with **Eliot Winer**.

Alex Renner earned his MS in Industrial Engineering with an HCI co-major. His research was Computer Aided Process Planning for Rapid Prototyping using a Genetic Algorithm. Matt Frank served with Eliot Winer as co-major professors.



Vijay Kalivarapu earned his PhD in Mechanical Engineering with an HCI co-major. Vijay's research was Improving solution characteristics of particle swarm optimization through the use of digital pheromones, parallelization, and graphical processing units (GPUs).



Eric Foo earned his PhD in Mechanical Engineering with an HCI co-major. Eric's research was A Framework for Tumor Segmentation and Interactive Immersive Visualization of Medical Image Data for Surgical Planning.



Eric also received the university's Research Excellence Award. This award recognizes graduating students for outstanding research, academic superiority, and the ability to develop a well-written product.

Congratulations to these students!

Fall 2008 Graduation Deadlines

August 29: Last date to file an Application for Graduation for the Fall 2008 semester.

November 5: Last date to cancel your Fall Graduation.

November 26: Last date for your Final Oral Exam

December 2: Last Date to submit your signed Thesis Submission Form.

December 5: Last Date to submit Approval Slip.

New HCI Curriculum

HCI faculty approved the recommendation from the HCI Supervisory Committee to adopt new curriculum for the HCI Graduate program. This curriculum is in effect for those students admitted in the Fall 2008. Students admitted before the Fall 2008 will fall under the previous curriculum guidelines.

The new curriculum was developed using the ACM definition of HCI, which states *Human-computer interaction is a discipline concerned with the design, evaluation and implementation of interactive computing systems for human use and with the study of major phenomena surrounding them.*

Courses will be offered in the four categories of Design, Implementation, Evaluation and Phenomena. MS and PhD students will be required to take one course from each of the four categories. PhD students will also be required to take two additional courses, either from these categories or from a list of recommended electives. Students will also be required to attend the HCI 591, Seminar in HCI. MS students will need 2 seminar credits and PhD students will need 4 seminar credits.

Design

HCI/PSYCH 521 Cognitive Psychology of HCI

ArtGR 672B Graphic Design and Human Interaction: Design for Social Inclusion

Implementation

HCI 575X Computational Perception

ENGL/HCI 520 Computational Analysis of English

Phenomena

MIS 655 Organizational and Social Implications of HCI

JLMC 598 Communication Technology-Philosophy and Ethics

Evaluation

Stat 401 Statistical Methods for Research Workers

Stat 430X Empirical methods for Computer Science

HCI/CI 504 Managing and Evaluating Instructional Technology Programs

Recommended Electives

CI 503 Theories of Designing Effective Learning and Teaching Environments (*Design*)

ArtIS 508 Computer Aided Visualization (*Implementation*)

HCI/CI 603 Advanced Systems Design (*Implementation*)

HCI/GEOL 558 Introduction to the 3D Visualization of Scientific Data (*Implementation*)

CprE/ME 557 Computer Graphics and Geometric Modeling (*Implementation*)

HCI/ME 580X Virtual Worlds and Applications (*Implementation*)

CI 511 Technology Diffusion Leadership and Change (*Phenomena*)

This curriculum will be revised as courses are no longer offered and as new courses of HCI relevance are added.

Students needing to register for HCI 699 Research Credits this fall can contact Pam Skill for the reference number of your major professor's section.

The HCI Graduate Program has been an REU site for the past three summers. Surveys of past interns show that 88% of them are in graduate school or attend to apply. 94% of these students indicated that their SPIRE-EIT experience was an important part of that decision.

Forty-five interns from 26 colleges and universities from across the country participated in the first three years of this program.

SPIRE-EIT Summer REU Program

The fifteen interns of the SPIRE-EIT summer program presented posters and technical demonstrations of their research on August 1 during the campus wide Summer Research Symposium. Over 80 interns from across campus also participated in this event by presenting posters.



Research presented included:

Magic Table: This project focused on the use of desktop display interfaces for augmented reality (AR) gaming. Interns: **Travis Christian**, Embry-Riddle Aeronautical University; **Samantha Levine**, University of San Diego; **Matthew Scheinerman**, Haverford College. HCI Mentors: **Marisol Martinez** and **Andrew Koehring**. Faculty Mentor: **Eliot Winer**.

Biology in VR: The goal of this research was to enhance the user experience of the Meta!Blast educational video game by animating characters, adding particle systems to enhance visual realism, and creating a look and feel that matches the artistic approach of the visuals. Interns: **Jenna Langer**, California State University; **John Morales**, University of Puerto Rico at Humacao; **David Oluwatimi**, Norfolk State University. HCI Mentor: **David Kabala**. Faculty Mentor: **Eve Wurtele**.

iPhone Development: The team explored the iPhone's unique abilities to create two multi-player games. Interns: **Paul Clay**, Reed College; **Jasmine Jones**, University of Maryland, Baltimore County; **Nizar Khalife**, University of Puerto Rico at Humacao. HCI Mentors: **Ken Kopecky** and **Brandon Newendorp**. Faculty Mentor: **Eliot Winer**.

Multi-touch Table: The team created Baseplate, a multi-touch application that leverages the advantages of collaboration in a multi-touch environment. Interns: **Cole Anagnost**, Iowa State University; **Thomas Niedzielski**, Concordia College; **Desiree Velazquez**, University of Puerto Rico at Humacao. HCI Mentor: **Prasad Ramanahally**. Faculty Mentor: **Stephen Gilbert**.

Robot Learning: This project addressed the development and usability of a teleoperation program for two Barrett Whole Arm Manipulators (WAMs). Interns: **Cody Glover**, DePauw University; **Brian Russell**, University of Arkansas at Fayetteville; **Allison White**, Lehigh University. HCI Mentors: **Jivko Sinapov** and **Matt Miller**. Faculty Mentor: **Alex Stoytchev**.

Stephen Gilbert and **Jim Oliver** directed the program, with help from program mentors **Eva Tao** and **Catherine Peloquin**.

Kofi Whitney Recognized

Kofi Whitney, HCI PhD student, received the “Future is Now” award in August. The award was presented at the 13th Annual Iowa Induction Ceremony for the Iowa African American Hall of Fame and included a \$1000 scholarship. This award is presented to students who display exemplary leadership skills, dedication to and interest in science, and excellence in research and technology.

Kofi has a Computer Science home department and **Les Miller** serves as his major professor. Kofi is also a GEM Science Fellow.

Two other HCI students have been recognized with this award. Tanasha Taylor, HCI MS Graduate 2008 and Lew Hill, HCI PhD Graduate 2006 were recipients of this award in 2006 and 2007.



If you have any items of information to share with HCI faculty and students, please contact Pam Shill. We are interested in hearing about faculty and student awards, publications, conference presentations or other items of interest.

New HCI Faculty

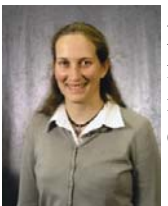
The HCI Graduate Program welcomed four new faculty members over the summer.



Lisa Nolan, Associate Dean of Veterinary Microbiology and Preventive Medicine. Lisa’s research focuses on bacterial diseases of production animals, including their effects on animal health, public health and food safety. She will serve as the major of professor of Paul Mangiamele, HCI MS student.



Amr Kandil, Assistant Professor of Civil, Construction, Environmental Engineering. Amr’s research focus is feasibility of visualization and simulation applications to improve work zone safety and mobility.



LeAnn Faidley, Assistant Professor of Mechanical Engineering. LeAnn’s research focuses on Active/smart materials, structures, and systems; Characterization, modeling, application and control of magnetically activated materials; magnetorheological elastomers; smart materials for medical devices.



Lie Tang, Assistant Professor of Agricultural and Biosystems Engineering. Lie’s research focus is agricultural automation and robotics.

We welcome these faculty members to HCI!

New HCI Online MS Program

The HCI Supervisory Committee recently approved the addition of a new HCI Online degree program. This degree was created from the growing demand from business and industry for a masters program that provides education in the field of HCI. This program is targeted towards the working professional who is not able to come to campus to study.

Students in this non-thesis program will take 27 credits of course work plus a 3 credit Capstone Course to complete the program.

Admission requirements are the same for this program as they are for other HCI degree programs. Currently there are five students enrolled in this program, with five more applications already submitted.

Women in HCI Lecture Series

This fall the HCI Graduate Program will host a Women in HCI Lecture Series. Women active in HCI research and education are being invited to campus to speak to our students, as well as to other interested students across campus.

The first lecture scheduled will be given by Roberta Klatzky from Carnegie Mellon University. Dr. Klatzky is a Professor of Psychology at CMU and also on the faculty of the Center for Neural Basis of Cognition and the Human-Computer Interaction Institute. Her talk will be given on Friday, October 31 at noon in the Howe Hall Auditorium.

Please watch for announcements of other lectures during the Fall semester.

HCI Seminar

All interested HCI faculty and students are invited to participate in the HCI Seminar, which meets each Friday from 12:10—1pm in Room 20 Howe Hall. Students who are enrolled in the class will be presenting articles on HCI topics, such as Design for People with Disabilities, Usability, Educational Technologies, Gaming, Information Visualization, and other topics. HCI faculty with expertise in these areas will also be invited to participate in these discussions.

A Google Group has been set up so the group can continue these discussions online. Stephen Gilbert, the Seminar leader, is also experimenting with a technology which will allow students to participate from a distance.



Roberta Klatzky, from CMU will be giving a Women in HCI Lecture on October 31 at noon in Howe Hall.

HCI Student Group Officers

The HCI Student Group will have a new slate of officers this year.

Michael Oren— President

Adam Faeth—Vice president

Eric Marsh - Treasurer

Eva Tao and **Eric Marsh** will serve as the Graduate and Professional Student Senators.

Thanks to these students for volunteering to serve.

*HCI Student
Group
Meeting*

Thursdays

6-7 pm

*Room 20
Howe Hall*

Publications and Conference Presentations



Jimmy Bush recently was published in Computers in Human Behavior in May. His article is titled Viability of virtual reality exposure therapy as a treatment alternative. Jimmy is an HCI MS student working with **Tony Townsend** in LOMIS. He works for LexMark in Lexington, Kentucky.



Manoj Karkee was recently published in Computers and Electronics in Agriculture. His article is titled Quantifying sub-pixel signature of paddy rice field using an artificial neural network. Other authors include B.L. Steward, L. Tan, and S. Abd. Azziz. Manoj is an ABE PhD student with an HCI co-major. He is working with **Brian Steward**.



Jeremiah Still's presentation on the paper entitled: "An Empirical Investigation of Affordances and Conventions" which is co-authored with Professor **Veronica Dark** received the Best Paper Prize from the 3rd International Conference on Design Computing + Cognition hosted by the Georgia Tech. Jeremiah is an HCI PhD student with a Psychology home department. Veronica Dark serves as his major professor.

Farrah Yusop and **Ana Paula Correia** have been invited to present at the Participatory Design Conference in Bloomington, Indiana on October 1-4. Their presentation title is "I don't want to be empowered:" The challenge of involving real-world clients in instructional design experiences. Farrah is a PhD student in Curriculum and Instruction with an HCI co-major. Ana is an Assistant Professor in the Center for Technology Learning and Teaching and an HCI faculty member.

*Please contact
Pam Shill with
information
about your
publications or
conference
participation.
Publication
information is
now being
placed on the
HCI website.*

IOWA STATE UNIVERSITY

Human Computer Interaction Graduate Program

Pam Shill, Administrative Specialist
1620 Howe Hall
Iowa State University
Ames, IA 5011

Phone: 515-294-2089
Fax: 515-294-5530
E-mail: pshill@iastate.edu

Please see our website at
www.hci.iastate.edu.

Fall 2008 HCI

Application Recap

80 Applications received.

40 PhD applications.

37 MS applications.

3 Certificate applications

50 from international students.

30 from domestic students.

57 male applicants.

23 female applicants.

13 students accepted.

August HCI Supervisory Committee

The HCI Supervisory Committee is the group responsible for review of all aspects of the HCI program, for guiding the establishment of policy, and for interpreting and implementing policies that have been established by the HCI membership.

Members of this committee include:

Jim Oliver, Mechanical Engineering, Chair

ChiuShui Chan, Architecture

Julie Dickerson, Electrical and Computer Engineering

Doug Gentile, Psychology

Steven Herrstadt, Art and Design

Brian Mennecke, Logistics, Operations, Management Information Systems

Michael Oren, HCI Student Representative

The committee met on August 27 to discuss the following:

Another implementation option may need to be considered since Nick Pendar has left the university.

An HCI Faculty Search will be conducted this semester.

Options to an HCI Retreat, including social networking activities, were discussed.

The HCI Recruiting Open House will be held on February 6, 2009.

The committee will focus on faculty collaboration this year.

Discussion of how the new budget model affects interdisciplinary students was held.

The next meeting will be September 10, 2008