

Helen Wauck

wauck2@illinois.edu (414)617-5226
wauck2.web.engr.illinois.edu

EDUCATION

University of Illinois Urbana-Champaign, Champaign, IL *August 2014-present*
Ph.D., Computer Science: est. May 2019, Current GPA: 3.98
Advisors: Professor Wai-Tat Fu and Professor Brian Bailey

Gustavus Adolphus College, St. Peter, MN *September 2010-June 2014*
Bachelor of Arts: June 2014
Majors: Honors Computer Science and Mathematics, GPA: 3.99

PRIMARY RESEARCH INTERESTS

Video games for spatial skill training; informal learning; learning science; cognitive training

PUBLICATIONS

H. Wauck, G. Lucas, A. Shapiro, A. Feng, J. Boberg, J. Gratch. *Analyzing the Effect of Avatar Self-Similarity on Men and Women in a Search and Rescue Game* (CHI 2018).

H. Wauck, Z. Xiao, P.T. Chiu, and W.T. Fu. *Untangling the Relationship Between Spatial Skills, Game Features, and Gender in a Video Game* (IUI 2017).

H. Wauck and W.T. Fu. *A Data-Driven, Multidimensional Approach to Hint Design in Video Games* (IUI 2017).

H. Wauck, Y. Yen, W.T. Fu, S. Dow, E. Gerber, and B. Bailey. *From in the Class or in the Wild? Peers Provide Better Design Feedback Than External Crowds* (CHI 2017).

H. Wauck. *Game Features and Individual Differences: What Makes a Spatial Skill Training Video Game Effective?* (IUI 2017 Student Consortium).

RESEARCH EXPERIENCE

Graduate Research Assistant *August 2014-present*
University of Illinois Urbana-Champaign

Spatial skill training: Study the effect of video game features and player behaviors on spatial skill acquisition. Supervise interdisciplinary team of 3-8 students. Advisor: Wai-Tat Fu

Hint systems: Study relationships between player experience, behavior, and hints in a puzzle game. Supervise a team of 2-3 students. Advisor: Wai-Tat Fu

Design feedback: Compared UI design feedback from online crowds and course peers.
Advisor: Brian Bailey

Visiting Research Assistant *May 16, 2017-August 11, 2017*
USC Institute for Creative Technologies

Conducted controlled study analyzing effect of photorealistic self-similar avatars on player performance and experience in a computer game. Advisors: Gale Lucas and Jonathan Gratch

Summer Mathematics REU Program*June 3, 2012-July 28, 2012**Boise State University*

Discovered a simple criterion for the sortability of ciliate DNA strings using a graph-based visualization. Worked on an interdisciplinary team with two Biology majors.

SELECTED AWARDS AND HONORS

NSF Graduate Research Opportunities Worldwide (GROW) Fellow 2018

Via NSF GRFP; funding for 6 month international research collaboration in Switzerland

NSF Graduate Research Fellow 2016

Prestigious 5 year fellowship with 3 years of funding (< 12% acceptance rate)

Invited Young Researcher, 4th Heidelberg Laureate Forum 2016

Prestigious international computer science and mathematics meeting (11% acceptance rate).

Grace Hopper Scholar 2015

Full sponsorship by the NSF to attend the 2015 Grace Hopper Conference

CRA-W Grad Cohort 2015 and 2016

Full sponsorship to attend the two-day workshop for graduate women in CS

Ray Ozzie Computer Science Fellowship *September 2014-May 2015*

Merit based; 1-3 incoming computer science graduate students receive this award each year

Phi Beta Kappa Society Member *May 2014-present*

Oldest U.S. academic honor society; depth and breadth of academic excellence in liberal arts

Corey Ervin Prize for Outstanding Contribution to the Department *May 2013*

Awarded jointly with club president for resurrecting the inactive Math and CS Club

Math and Computer Science Club Officer *September 2012-May 2014*

Treasurer (2012-2013), President (2013-2014)

SERVICE AND TEACHING

Grad Ambassador and Grad Mentor *January 2015-present**University of Illinois Urbana-Champaign*

Welcome students on Prospective Student Weekend, answer graduate school questions, guide and advise assigned CS PhD student mentee through their first semester.

Comp. Sci Tutor, Lab Assistant, and Grader *September 2012-May 2014**Gustavus Adolphus College*

Tutored and graded programming assignments for Intro to CS I and II (Java and Python).

Calculus Tutor *September 2011-May 2012**Gustavus Adolphus College*

Tutored Precalculus through Multivariable Calculus with team of 2 other tutors.