

Helen Wauck
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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

FIRST AUTHOR PUBLICATIONS

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

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

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

Exploring the Development of Spatial Skills in a Video Game (IUI 2016 Student Consortium). H. Wauck.

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. Submitted paper to CHI 2018.

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.