RESEARCH STATEMENT

I work to understand how to improve the role of technology with respect to personal and societal issues. I design, build, and implement systems that are more intuitive to human needs in terms of the safety and services they provide. I am currently pursuing research opportunities in Human-Computer Interaction that take advantage of machine learning, image processing, and interaction design techniques. I am interested in making, sustainability, wearables, smart technology, robotics, and games.

EDUCATION

**University of Maryland, College Park**  
Present  
Doctoral Candidate, Department of Computer Science  
Advisor: Dr. Jon E. Froehlich  
Area: Human-Computer Interaction & Sustainable HCI

**University at Albany, State University of New York**  
2010  
Master of Business Administration  
Area: Information Technology Management  
Thesis: The Impact of Collective Efficacy on Organizational Behaviors

**Master of Science, Computer Science and Applied Mathematics**  
Area: Design & Project Management  
Qualifying Project: The Design of a Content & Business Management System for Collegiate Sports

**Bachelor of Science, Computer Science and Applied Mathematics**

HONORS, AWARDS, & PROFESSIONAL DEVELOPMENT

2017  
All S.T.A.R. Fellow. The Graduate School, University of Maryland

2017  
Future Faculty Fellow. The Clark School, University of Maryland

2016  
Jacob K. Goldhaber Travel Award. The Graduate School, University of Maryland

2015  
Outstanding Graduate Assistant Award, The Graduate School, University of Maryland

2015  
Level 1 Thermographer Certification, Infrared Training Center

2014  
HCIL Conference Travel Award, Human-Computer Interaction Lab, University of Maryland

2013  
Distinguished Teaching Assistant Award, Center for Teaching Excellence, University of Maryland

2013  
John D. Gannon Travel Award, Department of Computer Science, University of Maryland

2012  
IGDA Scholar Award, International Game Developers Association

2011  
Graduate Participant, Revolutionary Aerospace Systems Concept Academic Linkage, National Institute of Aerospace

2010  
Certified Scrum Master, Scrum Alliance

2010  
Global Business Strategic Management Team Champion Award, The Business School, University at Albany

2003  
EntrePrep, Lally School for Entrepreneurial Leadership, Rensselaer Polytechnic Institute

RESEARCH & WORK EXPERIENCE

**Graduate Research Assistant, UMIACS, University of Maryland**, College Park, MD, 2014- Present  
Makeability Lab, Human-Computer Interaction Lab, Department of Computer Science. Research Advisor: Dr. Jon E. Froehlich

**User Experience Research Intern, Microsoft Research**, Bellevue, WA, 2015  
Research Advisors: Tapas Kanungo & Susan Dumais

**Teaching Assistant, Department of Computer Science, University of Maryland**, College Park, MD 2012 – 2016  
Introduction to Human Computer Interaction, Introduction to Image Processing, and Introduction to Computer Systems

**University Career Center & the President’s Promise, University of Maryland**, College Park, MD, 2010 – 2012  
Web Services Developer

**Intriguing Design Studios Incorporated**, Albany, NY, 2007 – Present  
President (Project Manager/Developer)

Graduate Assistant (Web Applications Developer)

Information Technology Intern (Technician/Programmer)
RESEARCH & WORK EXPERIENCE (Continued)

Interactive Media Center, University Library, University at Albany, State University of New York, Albany, NY, 2006 – 2007
Student Consultant (Technician/Consultant)

The Office of the Chief Information Officer, Office of the State Comptroller, Albany, NY, 2006
Project Management Intern

Information Technology Intern

CONFERENCE PUBLICATIONS


JOURNAL PUBLICATIONS


EXTENDED ABSTRACTS & ADJUNCT PUBLICATIONS


WORKSHOP PAPERS

CONFERENCE PRESENTATIONS


POSTER PRESENTATIONS

“Simplifying overviews of temporal event sequences.” CHI 2016, San Jose, California, USA, May 7 - 17, 2016.


INVITED TALKS


“Exploring non-professional smartphone-based thermographic energy auditing.” 32nd Annual HCIL Symposium, College Park, Maryland, USA, May 26, 2016.

“Understanding the role of thermography in energy auditing: current practices and the potential for automated solutions.”
University of Maryland Baltimore County, Baltimore, MD, USA, March 30, 2015.


“Game jams, SCRUM, and the development of independent video games.” 1st Annual UMD Video Game Showcase, College Park, Maryland, USA, April 14, 2013.

GRANTS AND AWARDS

2014 Application for Engineering Funds to Support Automated Thermography and Building Sustainability
University of Maryland, Office of Sustainability, $11,500.
Led grant proposal with co-author Dr. Jon E. Froehlich.

TEACHING

University of Maryland, College Park

2015 Volunteer Instructor, CMSC838L: Advanced Topics in Programming Languages; HCI Reading Seminar
2013 - 2016 Teaching Assistant, CMSC434: Introduction to Human-Computer Interaction
2012 Teaching Assistant, CMSC426: Introduction to Image Processing
2012 Teaching Assistant, CMSC216: Introduction to Computer Systems

MENTORING

Present Jonah Chazam, High School & Undergraduate Intern
Present Matt Brady, Undergraduate Intern
Present Anthony Castrio, Undergraduate Intern
2016 Julia Zheng, Undergraduate Intern
2016 Luka Zhupa, Undergraduate Intern
2014, 2016 Jamie Gilkeson, High School & Undergraduate Intern
2015, 2016 Erica Brown, Undergraduate Intern
**PROFESSIONAL ACTIVITIES/SERVICE**

Present  
Department Council, Department of Computer Science, University of Maryland

Present  
Student Member, Association for Computing Machinery (ACM) and SIGCHI

Present  
Student Member, International Game Developers Association

Present  
Project Manager & Contributor, Independent Video Game Project(s)

2017  
Reviewer, Proceeding of the ACM on Interactive, Mobile, Wearable, and Ubiquitous Technologies (IMWUT)

2016, 2017  
Reviewer, Journal of Medical Internet Research (JMIR)

2016  
Graduate Student Ambassador, Department of Computer Science, University of Maryland

2016  
Reviewer, Computer-Human Interaction in Play (CHI PLAY)

2016  
Student Volunteer, Human Factors in Computer Systems Conference

2015 – 2016  
Education Committee, Department of Computer Science, University of Maryland

2014 – 2016  
Reviewer, Pervasive and Ubiquitous Computing

2013 – 2017  
Reviewer, Human Factors in Computing Systems (SIGCHI)

2012 – 2013  
Vice President, University of Maryland Student Chapter of the Association for Computing Machinery

2012 – 2013  
Guest Columnist, BaltimoreGamer

2011  
Volunteer, University of Maryland STEM Expo & University of Maryland Day

**REFERENCES**

Mei-Hwa Chen, PhD  
Associate Professor  
Computer Science Department  
University at Albany  
Albany, NY 12222  
mhc@cs.albany.edu

Ben Shneiderman, PhD  
Professor  
Computer Science Department  
University of Maryland  
collegepark, MD 20742  
ben@cs.umd.edu

Tapas Kanungo, PhD  
Principal Applied Scientist  
Bing Research and Development  
Microsoft Research  
Redmond, WA 98052  
tkanungo@microsoft.com

Jon E. Froehlich, PhD  
Assistant Professor  
Computer Science Department  
University of Maryland  
collegepark, MD 20742  
jonf@cs.umd.edu

*Additional references available upon request.*