Yiwei Yang

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EDUCATION

University of Michigan Ann Arbor, MI

Major: Computer Science GPA: 3.5/4.0 Anticipated graduation date: April 2019

Course Highlights: Web Systems, Computer Security, Data Structures and Algorithms, Linear Algebra

Awards/Honors: Dean's List (2015 Fall, 2017 Winter), qualification to American Invitational Mathematical Examination (top 5% nationally)

EXPERIENCE

Undergraduate Researcher advised by Prof. Walter S. Lasecki

Sept 2015 - Present

In Crowds and Machines Lab

- Worked on interdisciplinary projects relating to crowdsourcing, and artificial intelligence; Currently leading a team of 4 students
- Developed crowd-powered tools using a variety of web technologies such as Node, Express, Rest API, and MongoDb
- Submitted 5 papers and 1 poster with Professors and lab mates to top conferences in Human Computer Interaction, with 3 papers and 1 poster accepted

RESEARCH PROJECTS

Instantaneous Crowdsourcing via Just-in-Time Training

May 2017 – Sept 2017

- Created Lightning Dodger using JavaScript, a turn based web game to collect data on people's response speed and accuracy
- Pioneered a "look ahead" system that sends crowd players snapshots of possible future states of the game, collects and aggregates their inputs, reducing the average dodging speed from 553ms to under 4ms.
- Worked with various APIs such as AWS, NumPy to communicate with users, process and analyze data

Remixing Animations For More Effective Crowd-Powered Prototyping Of Interactive Interfaces

Mar 2016 – May 2017

- Programmed animation awareness feature using MeteorJs and JQuery to facilitate the collaboration of crowd workers
- Developed a path visualization and manipulation feature using JavaScript and SVG

Codeon: On-Demand Software Development Assistance

Sept 2015 - Feb 2017

- Built communication functionality between end-user and helpers using socket.io
- Enhanced user interface with AngularJs to help users learn the tool more quickly
- Cooperated with Professor and 3 graduate students to publish the paper in CHI conference

Preserving Privacy in Crowd-Powered Systems

Jan 2017 - May 2017

- Innovated an image filtering algorithm which reduces cost by 40% and augments user privacy
- Tested and refined the tool to ensure its complete functioning

PERSONAL PROJECTS

Michigan Tutoring Application

June 2017 - Present

- Devised a web platform that enables students to seek tutors using Node, Express, MongoDb, and JQuery
- Implemented the interaction system between students and tutors using web sockets

Cat Clicker

June 2017 – October 2017

• Designed and developed an image clicking game that amuses users with cute cat images using ReactJs, Rest API, and SQLite3

SELECTED PUBLICATIONS

- Y. Chen, S. W. Lee, Y. Xie, Y. Yang, W. S. Lasecki, S. Oney. Codeon: OnDemand Software Development Assistance. In Proceedings of the International ACM Conference on Human Factors in Computing Systems (CHI 2017), Denver, USA.
- S. W. Lee, Y. Yang, S. Yan, Y. Zhang, I. Wong, Z. Tan, M. McGruder, C. M. Homan, W. S. Lasecki. Creating Interactive Behaviors in Early Sketch by Recording and Remixing Crowd Demonstrations. In AAAI Conference on Human Computation Demos (HCOMP 2016), Austin, TX.
- H. Kaur, M. Gordon, Y. Yang, J. Teervan, E. Kamar, J. Bigham, W. S. Lasecki. CrowdMask: Using Crowds to Preserve Privacy in Crowd-Powered Systems via Progressive Filtering. In AAAI Conference on Human Computation Demos (HCOMP 2017), Quebec City, CAN.

SKILLS

Programming Languages: C++, Javascript, Python, HTML5/CSS, PHP, SQL

Frameworks & Softwares: Node, Express, React, Flask, JQuery, Socket.io, MongoDb, Git, Matlab, Angular, Meteor