Yidong Huang **Computer Science Department**

CONTACT INFORMATION
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INTERESTS

Research and professional development in Machine Learning, Human-computer Interaction and Computer Graphics

EDUCATION

University of Wisconsin, Madison August 2013 to May 2017

B.S., Computer Science, *Expected:* May 2017

- Major GPA: *4.00*
- Overall GPA: *3.91*

RESEARCH EXPERIENCE

Undergraduate Researcher

Wisconsin Human-Computer Interaction Laboratory June 2015 to present

- Involved in developing a web program that provides routing instructions based on driving preferences for different driving senarios using GoogleMap API
- Developed a web application for OpenDS driving simulator to faciliate driver's awareness of the driving task
- Developed an algorithm that integrates automonous driving into manual driving in the driving simulator
- Developed an algorithm that provides handoff between different driving modes in the driving simulator

WORK EXPERIENCE

Software Development Engineer Intern

Amazon.Inc June 2016 to August 2016

- Designed and built backend web service APIs for storing and providing suggestions for package attributes under Spring Framework, and deployed new APIs in production pipeline
- Implemented service client for Seller Central's backend
- Used AngularJS and underscore.js to visualize new features in UI
- Unit testings over various projects

Assistant LIMS Developer

Great Lakes Bioenergy Research Center Sept 2015 to May 2016

- Assisted with implementing LIMS(Lab Information Management System) workflow according to system requirements and specifications
- Made generic template scripts for the analysis of similar compounds
- Reorganized the code for inventory logging and email management configuration to improve the scalability and extensibility of the system

PAPER IN PREPARATION

1. Wang D., Simonson J., Mutlu B. and **Huang Y.** "Facilitating Drive-Vehicle Handoffs with Varying Levels of Assistance"

Class Projects

XV6 Implementation

- Implemented descending stack for memory usage
- Added multi-threading system calls based on native system calls
- Added checksum for XV6 file system

Graphics Town

- Used hierarchical modeling to build models
- Utilizied WebGL to realize different shading and texturing, and implemented multi-path shadowing algorithm to render shadows

Database/ Machine Learning

- Implemented B+ tree
- Implemented and anaylized various ML algorithms such as decision trees, K nearest neighbors, neural networks and bayesian networks

Awards

Dean's Honor List(all semesters)

Service

Badger Volunteer — June 2014 – August 2014

- Assisted with the construction of a green house at a Spring Harbor High School
- Built digital photo library for NGO Prairie Enthusiasts

References

Bilge Mutlu
Associate Professor — E-mail: bmutlu@wisc.edu
Department of Computer Science
Department of Psychology
Department of Industrial Engineering
University of Wisconsin, Madison

Eftychios Sifakis
Assistant Professor — E-mail: sifakis@cs.wisc.edu
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