Andrew Geng

Phone: (608)999-0795 | Personal Webpage: https://pages.cs.wisc.edu/~ageng | Email: ageng@wisc.edu
Github: https://github.com/gengandrew | Address: 630 Samuel Dr, Madison WI 53717

Work and Internship Experiences

IBM (Full Stack Software Intern) **(Summer 2019 & Summer 2020)**
- Full Stack Software Intern for the IBM Systems team at the Silicon Valley Lab location.
- Worked on developing backend Java applications with corresponding test case components.
- Significantly improved overall application runtime from 2 hours to 50 min.

Boston Scientific (Software Engineering Intern) **(Summer 2018)**
- Software Engineer Intern for the Automation team at the Arden Hills location.
- Worked on developing the Time Tracker application utilizing the .NET Framework.
- Managed User Experience interviews throughout the development life cycle.

Office of Cybersecurity (Cybersecurity Intern) **(Dec 2017 ~ May 2020)**
- Part time security analyst and developer for the Office of Cybersecurity.
- Assisted security officers with weekly and monthly reports on security incidents.
- Developed internal applications and improved existing network traffic scripts.

Research Experiences

Wisconsin HCI Laboratory (Undergraduate Researcher) **(2018 ~ present)**
- Co-investigator for a personal assistant study concerning specialized speech patterns.
- Designed study procedures and applied statistical analysis on collected experimental data.

Personal and Group Endeavors

Race Across American (RAAM):
- Developer within a team of 15 Engineers and Data Scientists working on an optimization model and application for the Race Across America competition.
- Partnered with companies such as Garmin, The Weather Company, AT&T, and UBIX.ai for technological support.
- Responsible for developing a web application utilizing React and Node.js.
- Webpage and source code can be found at: http://raam.davehaase.com and https://github.com/raam-2019

Team Envoy (Digital Pen Project):
- Gathered a group of 3 for the creation of a motion sensory digital pen which transfers hand drawn notes into a digital document.
- Manufactured a working prototype utilizing Arduinos and accelerometers.
- Utilized Fourier Analysis and Kalman Filters in conjunction with accelerometer data to read 3D motion.

First Robotics Competition (Badgerbots):
- Winning Chairman's Award (2014) and Inspiration Award (2015) at the FRC Wisconsin Regionals.

Education

University of Wisconsin-Madison **(September 2016 ~ Dec 2020)**
- Bachelor of Science in Mathematics and Computer Science [*with honors*]
- Coordinator of the Undergraduate Project Lab and active member of Triangle

Relevant Coursework

CS761 (Mathematical Foundations of Machine Learning) | CS525 (Linear Programming Methods)
CS577 (Introduction to Algorithms) | Math 632 (Stochastic Processes) | CS367 (Data Structures)