ANDREW ZHANG

andrewzhang.tech | zhang.w.andrew@gmail.com | /andrewzhang21 | /AndrewZhang17

EDUCATION

University of California, Santa Barbara (UCSB) *Santa Barbara, CA*

Master of Science in Computer Science, *GPA: 4.0* — *Expected June 2021*

Bachelor of Science in Computing, *GPA: 4.0* — *June 2020*

WORK EXPERIENCE

Microsoft *Redmond, WA*

Software Engineer Intern — *June 2020 – September 2020*

- Create machine learning model to predict when people's meetings may be scheduled based on previous calendar data with 85% accuracy
- Implement model for online use in scalable system, satisfying size and memory usage requirements
- Use predictions to intelligently suggest "Focus Times" for users, reducing the number of conflicts with future meetings

Software Engineer Intern — *June 2019 – September 2019*

- Increased efficiency of a component registration process for MyAnalytics developers by removing duplicate map registration
- Integrated AutoMapper library to reconcile a single registration for multiple use cases

NASA Jet Propulsion Laboratory OpsLab *Pasadena, CA*

Software Engineer Intern — *June 2018 – August 2018*

- Contributed to HoloLens augmented reality application enabling scientists to work virtually on the surface of Mars
- Formulated more efficient methods of manipulating textured meshes for generating Martian terrain
- Polished a HoloLens augmented reality application for visualizing proposed orbits of NASA's upcoming Europa Clipper mission
- Experimented with SpectatorView, an iOS application allowing users to experience the same holograms as a HoloLens user

PROJECTS

Tennis Ball Tracking App — *November 2017 – August 2019, June 2020 – Present*

- Built an application that measures the speed of a tennis ball using a mobile device's and laptop's camera feed with up to 20% discrepancy
- Learned OpenCV, background subtraction, optical flow and Android development to create a mobile app
- Integrate OpenCV functionality with Flask and Google Cloud Platform to migrate towards web app due to mobile limitations

Python Garbage Collector Analysis — *April 2020 – June 2020*

- Understood how CPython and PyPy garbage collectors functioned and how to modify their parameters
- Profiled the garbage collectors to examine their performance in different use cases
- Created a custom visualizer to see the performance effects of changing garbage collector thresholds

Augmented Reality Physics Classroom — *January 2019 – March 2019*

- Created HoloLens augmented reality application for high school physics curriculum, exploring projectile motion
- Leveraged Vuforia to design intuitive and easy-to-use control interface

ADDITIONAL EXPERIENCE

SB Hacks Sponsorship Lead *UCSB, Santa Barbara, CA* — *December 2018 – Present*

- Collaborate with team of 10 to organize SB Hacks, an annual 36-hour hackathon at UCSB that hosts over 400 students
- Created live page for SB Hacks V using Node, HTML, and CSS to provide attendees with information and updates during the event
- Direct our sponsorship strategies and manage the $40k+ budget for SB Hacks VII

Undergraduate Computer Science Mentor *UCSB, Santa Barbara, CA* — *April 2018 – March 2020*

- Mentored and tutored students in introductory Python on programming assignments
- Assisted students one-on-one and in groups with greedy, recursive, and dynamic programming algorithms and NP-Completeness
- Examined current research in computer science education, discussing applications at UCSB with faculty

TECHNICAL SKILLS

- Python, C#, C++, Java, Unity, Android