

HYUNRAE KIM

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EDUCATION

Washington University in St. Louis, St. Louis, Missouri

Candidate for B.S. in Computer Science with a Minor in Mathematics

May 2020

Honors: GPA: 3.70/4.00 | Dean's List (Fall 2016, Spring 2017, Fall 2017) | National Merit Finalist

WORK EXPERIENCE

Cyber-Physical Systems Laboratory, St. Louis, Missouri

December 2017 – Present

Research Assistant / Developer

- Work in a team of four to develop software for a government-funded medical study on the effects of a treatment for patients who have undergone a lung transplant.
- Built a Quality of Life survey for tablets to be used in more than twenty hospitals nationwide.
- Finishing an app to remotely monitor patients in their homes using a spirometer and pulse oximeter.
- App calculates a patient's normal range for lung capacity and uses machine learning library, scikit-learn, to adjust after false positives. With the addition of oxygen saturation measurement and a survey, the app will alert doctors to enroll the patient for laboratory testing when a decline is detected.
- Work with doctors and coordinators to discuss additional features, UI, and integration with hospital servers.
- Develop in Java, PHP, MySQL, and Python.

Washington University in St. Louis, St. Louis, Missouri

January 2018 – May 2018

Teaching Assistant

- Assisted for Data Structures/Algorithms and Introduction to Parallel and Concurrent Programming.
- Responsible for assistance during studio, office hours, and grading.

PERSONAL PROJECTS

Ninth Boulevard

April 2018 – Present

- Build a web platform for fashion enthusiasts to buy and sell clothing.
- Implemented a dynamic method for viewing listings, real-time messaging, community forums, and other ecommerce platform features such as account profile, following list, and search filter.
- Develop with React, Express.js, Node.js, Socket.IO, and MongoDB.

Noonlight for Google Assistant

March 2018

- Built a Google Action integrating Noonlight's RESTful API so users can call for help using home devices with Google Assistant.
- Intended use case is when user faces physical restraint or has no access to a phone in case of an emergency.

Amazon Alexa Skills Challenge: Kids (Finalist)

November 2017

- Created an educational children game for an online hackathon hosted by Amazon.
- Placed as one of twenty finalists out of 470 submissions with 2,000+ unique customers.

ArchHacks

October 2017

- Developed an iOS app that uses simple Mendelian genetics to output the probability of having specific genetic diseases, disorders, or traits.

SKILLS

Languages and Technologies:

- *Highly Proficient:* Java, JavaScript, PHP, React, Android, Swift, HTML/CSS, XML, SQL, Git
- *Proficient:* C, C++, Python, Linux, Node.js, MongoDB, HTTPS, AWS, Firebase