

Younseo Ryu

yoryu@ucsd.edu | <https://www.linkedin.com/in/younseoryu> | <https://github.com/YounseoRyu> | 408-533-5213

EDUCATION

University of California San Diego

Bachelor of Science in Computer Science - Major GPA: 3.73/4.00

San Diego, CA

Expected June 2021

EXPERIENCE

Software Engineer

Crown Sterling

March 2020 – Present

Newport Beach, CA

- Received training in the company's software architecture, big number libraries, encryption protocols, library integration, and frameworks
- Programmed tests to identify issues with software before the product launch - identified and analyzed bugs and errors found during the test phase and documented them for review after
- Developed the One Time Pad encryption protocol in C and Go, and integrated it as a service in the backend on top of Elliptic-curve Diffie-Hellman to enable strong encryption over the message and document transfers
- Built a random number generation service with Docker by utilizing Linux kernel and its services

Software Engineer at Ubiquitous Computing Lab

University of California San Diego

Jan 2021 – Present

San Diego, CA

- Architecting and building iOS and Android mobile applications with React Native for human health research in collaboration with otorhinolaryngologists in the School of Medicine
- Developing WebRTC streaming stack to achieve low-latency streaming of patient videos from mobile devices to GPU servers to enable stable ML analysis
- Integrating ML models into mobile applications to identify and monitor facial paralysis in patients over time
- Built a camera functionality that ensures a patient takes a clear video of every side of the face by utilizing ML models for facial landmark detection

Technical Assistant

Saline

Summer 2018 & Summer 2019

Seoul, South Korea

- Studied IP-XACT and received training in Magillem IP-XACT tools
- Researched relevant resources to assist members on fixing and reporting bugs
- Worked as a technical assistant at seminars on IP-XACT at Samsung Electronics and SK Hynix
- Assisted setting up lab environment and hands on introduction to Magillem IP-XACT packager

PROJECTS

Bright Claim | *MongoDB, Express, React, Node, AWS*

- Developed a full-stack web application that manages documents revolving around staffing companies, insurance companies, and the US government
- Implemented Node serving a REST API with React as the frontend and MongoDB as the database service
- Integrated JWT Authentication to ensure the secure user verification

Fake News Detector | *AutoML, Firestore, Web Scraping*

- Developed a Chrome extension that determines if a news article is legitimate
- Imported LIAR data set created by UC Santa Barbara, trained a ML model, and integrated the model to backend
- Utilized Web Scraping APIs to extract an article from any web pages if there is one

ACCOMPLISHMENT

2nd place on "Best use of Mux Video API" at USC Hackathon

- Developed a Java-based Android application that starts a livestream and location-sharing with your trusted friends, if you press a volume down button for 3 seconds. Implemented RTMP for livestream, HLS for the video playback, and Google Cloud Platform for location sharing. Firebase is used for creating friend groups.