

MICHAEL YU

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EDUCATION

University of California Los Angeles	BS, Computer Science	2022
	GPA: 3.97, Dean's List	
Relevant Courses Taken	Data Structures, Operating Systems, Computer Organization, Logic Design of Digital Systems, Discrete Math, Software Construction Laboratory	

WORK EXPERIENCE

NASA Goddard Space Flight Center – Software Engineer Intern 06/2020 - 08/2020

- Built React web interface for TAILOR system to automate Near Earth Network and Space Network spacecraft compatibility tests, cutting several weeks from the testing timeline
- Integrated React Redux to optimize frontend performance, increasing availability of mission data with a 5x reduction in the delay between database and frontend updates and lowering the re-render rate by 26%
- Developed Dockerized REST API with Flask to convert DOCX files to PDF, enabling engineers to view test procedure reports in the web interface without having to download report files
- Resolved critical Docker configuration bugs, providing the Delay Tolerant Network team with an easily deployable network ground test node

SketchyMedical – Software Engineer Intern 11/2019 - 03/2020

- Developed UI library to improve user experience for more than 40,000 customers using Angular
- Optimized performance of admin interface and reduced API calls by caching API responses using RxJS
- Created and deployed frontend design system used by the entire frontend development team to Heroku

Networked and Game Systems Lab, University of California Irvine – Research Intern 06/2018 - 09/2019

- Developed secure network joining protocol using Java, Python, and Bash and implemented byte array serialization, decreasing data transfer times by 50%
- Built Android application to conduct patient trials for iXercise platform using Java and Chirp.io SDK
- Designed background service to provide real-time biometric data being broadcast on the network

PROJECTS

LA Hacks Organizer – Tech Director

- Implemented hackathon live-site serving more than 1,000 participants, managed all hackathon submissions and coordinated with sponsorships team to assign and organize prizes

Image-tag

- Built self-hosted image management service using Node.js and Express.js to make local image files accessible by URLs, removing the need to redeploy frontend applications when updating images
- Containerized application using Docker and integrated PostgreSQL database to map tags to both server image files and external image URLs

Easy Planner

- Created Android application to generate digital planners by automatically extracting text from images, currently available on the Google Play Store with over 1,300 installs

ADDITIONAL INFORMATION

Technical Skills: Java, C++, JavaScript, React, Redux, Express.js, Docker, Git, Spring Boot, Python, Bash, Flask

Awards: National 4th Place in FBLA Cybersecurity Event, NASA International Space Settlement Design Competition Finalist, 3rd Place Congressional App Challenge District 48, 1st Place UC Irvine Rescue Robotics Design Competition