ROB STEILBERG

EDUCATION

Duke University, Durham, NC

2014 - 2018

B.S. Computer Science

Dean's List with Distinction, 3.72 / 4.0

DeNardis Memorial Award

Department of Computer Science

EXPERIENCE

ForeFlight (Boeing)

Software Development Engineer, 2021 - present

Austin, TX

• Working with ForeFlight's Directory team to support and improve the JetFuelX platform

Esri

Software Development Engineer, 2018 – 2021

Washington, DC

- Rebuilt ArcGIS Hub's obsolete domain resolution service into a scalable microservice with Express
 - o Containerized with Docker, built a CI/CD pipeline with Jenkins, and deployed via Helm to Kubernetes
 - o Saved Esri approximately \$100k in annual server costs via the shutdown of a legacy Rails application
- Implemented a complete UI redesign and CSS refactor of Hub's Ember-built WYSIWYG website editor
- Contributed to Esri's open source, cross-team/platform TypeScript libraries, plus several Ember libraries
- Directly mentored an intern on Hub's backend team during summer 2020; coached several new hires
- Engaged with ArcGIS Hub, Online, and Enterprise customers at the Esri UC and Esri Developer Summit

Intern, summer 2017

 Prototyped an application which templatizes ArcGIS Online mapping applications, making them compatible with any Esri-hosted dataset and decreasing application buildout time by over 85%

Duke Global Health Institute

Mobile Development Engineer, summer 2018

Roatán, Honduras

• Principal developer of mVax, an Android application powered by Firebase that records immunizations and generates vaccination reports, which increased vaccine patient throughput at Clinica Esperanza by 50%

SKILLS

Current: JavaScript, Node (Express, Ember, Gatsby), HTML/CSS (Sass, Tailwind), Redis, Docker, Kubernetes/ Helm, Jenkins, Linux; working knowledge of Rust, SQL (Postgres), nginx, AWS, and Elasticsearch Previous: TypeScript, jQuery, Python, Java/Android, Swift, C/C++, Ruby (Rails), R, Lisp (Racket), MIPS

PERSONAL WORK

roob1090

- Built a full stack pipeline and realtime API with Rust, Python, Express, and Docker for localized ADS-B tracking
 - o Hardware layer parses ADS-B signals decoded by dump1090 and then transmits them via WebSocket
 - o Server layer aggregates individual flights and enriches them with data from OpenSky and FlightAware
 - o Node worker threads continually perform geofencing to sort each flight into a given airspace of interest
 - o Hosted at aircraft.robsteilberg.io and powered by a Raspberry Pi on my balcony

INTERESTS

- Aviation; I am a student pilot based out of Potomac Airfield (VKX) currently pursuing a Private Pilot Certificate
- Global health and volunteer work in Latin America, with additional experience in Guayaquil, Ecuador working at an equine therapy rehabilitation center for children with special needs