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, staged via a Jenkins CI/CD pipeline, and deployed via Helm to Kubernetes
 - o Saved Esri approximately \$100k in annual server costs via the shutdown of a legacy Rails application
- 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 improving 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 overlooking DCA

INTERESTS

- Aviation, currently pursuing a Private Pilot Certificate and based out of Potomac Airfield (VKX)
- Recreational diving, holding SSI Open Water and PADI Advanced Open Water diving certifications
- Global health and humanitarian work in Latin America, with additional experience in Guayaquil, Ecuador working at an equine therapy rehabilitation center for children with special needs