# **TAYLOR A. SLOAN**

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Github: https://github.com/taylorsloan?tab=repositories

### **OBJECTIVE:**

Looking for new opportunities where I can combine creativity and good software engineering practices to create innovative products.

#### SKILLS:

- Android SDK & NDK, Kotlin, Java, Python, Scala, C/C++, Neo4J, SQL
- Experience with Firebase, AWS, Docker, Robotics, OpenCV, Arduino, IoT, 3D Design/Printing, Adobe XD

### **PROFESSIONAL EXPERIENCE:**

January 2018 – Present: Software Engineer (Beyond Limits Inc. – Glendale, CA)

As part of the development team

- Currently developing backend services for ML-based engine oil formulation SaaS product for Fortune-500 company (Scala, Akka, and Neo4j)
- Designed and assembled hardware and software for automated inspection robot for offshore oil rig inspections (ROS, OpenCV, Arduino, C, C++, Python, Fusion 360, and 3D Printer)
- Built frontend for Al-enhanced refinery optimization software (HTML, CSS, Javascript)
- Provided mentorship for interns on robotics projects for two summers

### June 2017 – January 2018: Android Developer (Berns Inc. – Canoga Park, CA)

As part of the development team

- Implemented new features from design inception to functioning modules in mobile app and backend server (Kotlin, Android SDK, Javascript, Node.js, and MongoDB)
- Assisted in design and architectural decisions for mobile application
- Facilitated productivity in other team members by providing assistance when needed

## **PERSONAL EXPERIENCE:**

**Makana (WIP)** A social media platform that provides users a way to collaboratively create digital greeting video compilations and attach them to QR codes.

- Designing app mockups of features and functionality using Adobe XD and building backend and mobile app to comply form and functionality
- Implementing application backend in Kotlin employing layered architecture practices with automated testing (Ktor, Neo4j, Docker, and AWS)
- Building mobile application with camera capturing, image analysis, and social interaction features in Kotlin using modern Android frameworks and methods (Firebase, AndroidX, LiveData, Coroutines, and Koin)
- Implementing TDD workflow with issue tracking to craft and deploy production-grade software

**Floralsignal:** An automated document OCR tool to help florist to stay organized and updated with floral arrangement orders received from wire service companies

- Implemented app server using Golang and image analysis server in Python (Postgres, Tesseract, and OpenCV)
- Built mobile application with features for authentication, order viewing, and receiving push notifications
- Adapted virtual printer to integrate document uploading and tracking into florists' preexisting workflow

**GPS Mail Tracker:** Low-power GPS/cellular tracking device which can be placed in a mail package which gets activated when there are sudden changes in acceleration. Upon acceleration, the device begins transmitting its location on Google Maps using a cellular radio.

- Combined off-the-shelf components and 3D printed parts to build hardware.
- Wrote firmware in C which operates the device using the Particle Framework and Arduino libraries.
- Implemented backend data storage using Firebase Realtime Database to receive status data and store device location
- Created Android application to remotely arm, disarm, and track the location of the device