Arnoldo Rodriguez

Computer Engineering
University of Waterloo (class of 2021)

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PROJECTS 💡

Resistor Scanner · **Android** app that scans resistors using the phone **camera** and determines the value in Ohms. It is fully written in **Kotlin** and without using any computer vision libraries. Google Play link: https://bit.ly/38d76Z3 (15K+ downloads)

Morse Code Encoder & Decoder · **iOS** & **Android** app that decodes Morse code using the phone **camera** and transmits using the camera flash and speaker. Google Play link: https://bit.ly/2VEM2rK (15K+ downloads)

Personal Website · Static website built from scratch using **HTML**, **CSS** and **JavaScript**, which contains more info about other projects. Visit at: https://bit.ly/2XbQRcE

Social Network Database · Created **APIs** for a social network **database** (data extracted from Kaggle) using **Go** and **GraphQL**.

RELEVANT EXPERIENCE 💼

Software Engineer | Cisco Meraki   San Francisco, California | Sept – Dec 2019
- Designed and developed app features in **React Native** to visualize networks of devices on maps using **Google Maps API.**
- Made **open source** contributions to the **react-native-maps community library** to add support for overlay rotations on maps.
- Used **Redux** to manage application state along with **redux-thunk** middleware.
- Maintained and updated existent **Android** and **iOS** native modules.

Mobile Developer | Oanda Corporation   Toronto, Ontario | Jan – Apr 2019
- Developed multi-chart trading feature for both **iOS** and **Android** platforms of Oanda's Forex Trading app.
- Worked along with designers in the implementation of custom feedback channels using **Firebase Remote Config.**
- Assisted in the implementation of trading alert subscription and notification system using **Firebase Cloud Messaging.**
- Ported features, trading tools and added multi-theme support to **Android** tablets and iPads.

Test Automation Developer | Laborie Medical Technologies   Mississauga, Ontario | May - Aug 2018
- Improved and validated existent tools to speed up by a factor of 6x the testing of medical devices' software.
- Developed **C#** tool to generate reports out of existent test plan data, and to manipulate test cases on **VSTS**.
- Added automation support for test steps related to medical software applications.

Embedded Systems Software Developer | Tigercat Industries   Paris, Ontario | Aug – Dec 2017
- Developed system in **C#** to visualize machine production data collected from sensors, with positive customer feedback.
- Created multithread **TCP/IP** network socket application to run transceiver simulations from multiple machines.
- Wrote maintainable and extensible code for web (**JavaScript**, **PHP**) and **.NET** applications.
- Implemented and documented algorithms for processing and displaying sensor data in **C#**-generated graphs and reports.
- Developed automated build system for transceivers' firmware using **Shell Scripts**.

SKILLS HIGHLIGHT ‹/›

Languages · C/C++, Kotlin, JavaScript, Java, Swift, Go, GraphQL, C#, Python, Shell Scripting, MySQL.
Tools & Frameworks · VSCode, Android Studio, IntelliJ, XCode, Firebase, Docker, Git, Amplitude, Jira, Phabricator, MATLAB.

ADDITIONAL EXPERIENCE 🏆

- Firmware developer at Midnight Sun student team · 2019 University of Waterloo
- Represented my hometown in the 13th edition of Mini Basket in Piazza International Tournament in Italy.