

# Ram Vellanki

🌐 ramvellanki.com

in [linkedin.com/in/ramv13](https://www.linkedin.com/in/ramv13) | ✉ [ramvai.vellanki@gmail.com](mailto:ramvai.vellanki@gmail.com) | 🐙 [github.com/ramv13](https://github.com/ramv13)

## EDUCATION

**CORNELL UNIVERSITY** | College of Engineering, BS in Computer Science Aug. 2015 - May 2018 | Ithaca, NY  
GPA: 3.83 Major GPA: 3.90 | Dean's List Minor: Electrical & Computer Engineering

Relevant Coursework (\* = A+, <sup>x</sup> = Teaching Assistant):

- Honors Data Structures
- Functional Programming<sup>\*\*</sup>
- Operating Systems
- Computer Organization
- Embedded Systems
- Microcontrollers
- Robotics\*
- Machine Learning<sup>x</sup>
- Graphics
- Circuits\*
- Computer Networks
- Linear Algebra\*

## SKILLS

**Programming:** Java • Kotlin • C • C++ • Python • Node.js • Android | **Web:** HTML • CSS • JS | **Other:** Git • SQL

## EXPERIENCE

**WAYMO** | Planner, Senior Software Engineer June 2020 – Present | Mountain View, CA

- TL (Tech Lead) of a horizontal team for the onboard planner to handle other vehicles cutting in.
- Work on various aspects of driving behavior such as evasive maneuvers or defensive driving.

**GIVEDIRECTLY** | Google.org Fellowship, Software Engineer September – November 2019 | New York, NY

- Worked part-time for the GiveDirectly nonprofit and helped develop a disaster relief mapping tool to locate the most effective regions for donation recipients considering both damage and pre-existing poverty.

**GOOGLE** | Video Ads, Software Engineer August 2018 – June 2020 | New York, NY

- Worked on backend for video ads on Google Ad Manager ([admanager.google.com](https://admanager.google.com)) which services various premium publishers such as Disney, Hulu, ESPN, and CBS.

**GOOGLE** | Search Ads, Software Engineering Intern May 2017 – August 2017 | Mountain View, CA

- Worked on the Product Listings team to improve features of product related search results involving both frontend work in a propriety templating framework as well as backend work in C++ all with extensive consideration for the large scale and low latency requirements of Google Search.

**CORNELL UNIVERSITY** | CUAir ([cuair.org](http://cuair.org)), Platform Lead October 2015 – July 2018 | Ithaca, NY

- Developed a control interface for a camera and gimbal mechanism on-board an unmanned aerial vehicle (UAV) and exposed it via a TCP API. This involved interfacing with hardware via a camera SDK and the gimbal's serial interface.
- Developed and maintained a performant Java/Kotlin web application server stationed on the ground to serve as a communication bridge between the UAV and web clients complete with features such as control interfaces for on-board systems as well as telemetry acquisition for the localization of images.

**RUTGERS UNIVERSITY** | WINLAB, Research Intern July 2012 – August 2013 | New Brunswick, NJ

Worked under Dr. Marco Gruteser

- Developed an Android application component that determines the centripetal acceleration of a device in a vehicle to detect if it is on the driver's side to aid in driver safety applications that block mobile device usage.  
[http://www.winlab.rutgers.edu/gruteser/papers/paper\\_CR.pdf](http://www.winlab.rutgers.edu/gruteser/papers/paper_CR.pdf)
- Developed an Android service which reads vehicle OBD-II data via Bluetooth so as to evaluate the safety of a driver.

## PROJECTS

IoT Security | PIC32 - 2017

WiFi enabled doorway security and monitoring system complete with features such as an alarm, real-time data feed, and web/mobile interfaces for access and control from anywhere in the world

[l.ramvellanki.com/iot-security](https://l.ramvellanki.com/iot-security)

MyGov | Android - 2014

Facilitates communication between Government officials and their respective constituents through an Android application that provides features such as polls and posts (Winner of House App Contest)

[github.com/nishilshah17/HouseApp](https://github.com/nishilshah17/HouseApp)

Tap | Android - 2014

Prototype that leverages the built-in Android accelerometer to detect tap gestures on the sides of a device and perform tasks such as shuffling music or switching between apps (Top 10 App at HackRU)

[tapapp.github.io](https://tapapp.github.io)

Projectile Motion | Android - 2012

An accurate graphical simulation of projectile motion with customizable launch speeds and angles displayed on a graph (3000+ installs on the Android Google Play Store)

[l.ramvellanki.com/projectile-motion](https://l.ramvellanki.com/projectile-motion)