

Raemond Bergstrom-Wood

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EDUCATION

- **University of California, Berkeley** Berkeley, CA
Bachelors of Science, Electrical Engineering and Computer Science May 2014

EXPERIENCE

- **Skip Scooters** San Francisco, CA
Senior Software Engineer January 2019 - Present
 - **Skip S3 Firmware Lead:**
 - ★ Hardware: STM32, STM8S, Android Phone
 - ★ Interfaces: USB (Android Open Accessory), CAN, I2C, UART, RS485
 - ★ Factory/Vendor travel and build support
 - ★ Managed vendor hardware and software development
 - **Skip Ninebot Firmware Lead:**
 - ★ MCUs: PIC24F, Android Phone
 - ★ Interfaces: USB (Android Open Accessory), UART
 - ★ Inherited a legacy contractor developed project and implemented a number of simplifications and critical bug fixes
 - ★ Reduced cell data usage by 75%
- **Essential Products** Palo Alto, CA
Software Engineer November 2017 - October 2018
 - **Home Accessories Firmware Lead:**
 - ★ Worked to create a home accessory road map
 - ★ Developed FreeRTOS based app and diag application
 - ★ Wrote sensor, wireless, and hardware interface libraries
 - ★ Designed and implemented ultrasonic sensor algorithms & filtering
 - ★ Brought up and developed the signal processing algorithms for 24GHz Radar based Human presence detection
 - ★ Worked with chip vendors through SOW/MSA to develop custom chip firmware
 - ★ CM Selection and Bringup
 - ★ Worked with a third party contractor to get through a POC electrical (schematics/layout) and PD (mechanical) design.
- **Arete Labs, a Stealth Home Security Company (Acquired by Essential)** San Francisco, CA
Co-Founder and only Software Engineer August 2016 - November 2017
 - **Firmware:**
 - ★ Developed FreeRTOS based app and diag application
 - ★ Wrote sensor, wireless, service connection and hardware interface libraries
 - ★ Designed and implemented sensor fusion & filtering
 - ★ WiFi Soft AP based pairing
 - ★ Device/Service in app pairing/provisioning
 - ★ Push notifications
 - Developed and designed a feature complete iOS app developed in Swift.
 - Industrial design, UI, UX ideation and feedback
 - Maintained system block diagram and reviewed all schematics & layouts
 - LT SPICE 120VAC Circuit Modeling & Analog Design
 - Patents: US20190120471A1, WO2019018317A1
- **Nest Labs/Google** Palo Alto, CA
RF Hardware & Software Engineer (Intern from May 2013 - June 2014) May 2013 - August 2016
 - **Nest Guard & Sense:** RF Hardware Lead
 - ★ LTE, WCDMA, GSM, WiFi, BLE, Thread (802.15.4) integration into Nest Secure
 - ★ Debugged and found manufacturable solutions for desensed radios (and sensors)
 - ★ Impedance matching filters, FEMS, LNAs, PAs

- ★ Schematic and Layout Reviews
- ★ Drove CM and In-house Validation
- ★ Factory build support
- ★ FCC, UL Certification Pretesting and Preparation

- **Nest Protect:**

- ★ Led validation of the Nest Protect alarm propagation over 802.15.4 in a crowded 2.4GHz environment
 - ★ Wrote python tool to automate all RF validation testing from the physical layer (integrating everything from RS232 power supplies, vector signal analyzers and spectrum analyzers) to networking applications
- Supported numerous projects in development, debugging RF circuits and modules, interacting directly with CMs, embedded platform and communication software teams
- Interviewed all new team members for RF Hardware Design Group and the Factory Software Team
- Experience with UL, FCC, ETSI, BT Sig Certification Testing
- Created/Architect-ed Nest's factory test system and brought up/hired a team to support it
- Built an internal website to host and plot RF validation data (Python, Flask, GAE)
- Patent: US10381722B2

nReduce, online startup incubator

Intern

San Francisco, CA

June 2012 - September 2012

- **Miscellaneous:** nReduce was a online startup incubator, that unlike YCombinator, any company could join. It hosted weekly project check-ins and allowed members of the startup community worldwide give feedback and advice to each other
 - Scraped publicly available lists of investors and found creative means to find contact information
 - Ended up with a very well attended and well covered Demo day with articles from PandoDaily, VentureBeat, etc.