JEFFREY BECKMAN
JeffLBeckman@gmail.com
https://github.com/jefflbeckman

11600 Barchetta Dr
Austin, Tx 78758
Mobile: **(214)-477-4069**

Education

Rose-Hulman Institute of Technology	B.S in Electrical Engineering	Feb 2011	3.1/4.0

Work Experience

- **Device OS Software Engineer**   **April '19 - Now**
  Amazon Lab 126, Austin Tx
  - Improved the cost efficiency of the expansive CI/CD deployment pipeline for the largest internal project at Amazon while also adding support for security and static code analysis across distributed teams
  - Created crash reporting and debugging automation tools used to triage and reduce total number of freezes and crashes
  - Defined OS debugging, triage, and stability KPI reporting procedures for greenfield operating system used by thousands of developers to rapidly debug complex issues
  - Designed and implemented a platform agnostic API for IoT devices to maintain a secure and persistent connection to AWS IoT using an MQTT client

- **OS Firmware Engineer**   **Aug '17 - Feb '19**
  Fitbit, San Diego CA
  - Brought original operating system to market for the Charge 3 and Inspire 2 products in under 12 months that reduced BOM costs and power requirements for the SoC by half
  - Implemented a low-power efficiency focused logging and metrics observability IoT solution to debug and eliminate crashes
  - Lead on-site support team at the factory improving production yields and ensuring an exceptional quality bar for the flagship Charge 3 product

- **Field Consultant Engineer**   **July '11 - May '17**
  Green Hills Software, Santa Barbara CA
  - Provided in depth custom technical support for embedded development tools including RTOS, C/C++ compiler, debugger, and probe
  - Optimized slow performing flash boot times to dramatically improve boot time performance for large automotive customers

- **Validation Intern**   **June'10-Aug'10**
  Freescale Semiconductor, Austin TX

- **Software Integration Intern**   **June'09-Aug'09**
  Northrop Grumman, El Segundo CA

Side Projects

- **Custom Prop Engineering**
  - Personal design, manufacturing, and repair for smart LED dance props
  - Designed custom PCBs for wireless sensors and interactive devices
  - Programmed gesture recognition test program to visualize patterns
  - Built iOS app for vision impaired users to read playing cards

Programming Proficiency

- **Languages** (Rust, C, C++, Asm, Python, Ruby, Typescript, Vue.js, Svelte, SQL, Make, Bash)
  OS (Embedded Linux, Yocto, FreeRTOS, Nuttx, INTEGRITY, Contiki, Android)
  IoT Protocols (MQTT, Thread, Wifi, Bluetooth, Zigbee, Cellular, LoRa, GPS)
  Hardware (Industry 4.0, Device Manufacturing, PCB Design, SMT rework, high-speed digital)
  Other Interests (Private Pilot License 130hr TT, Juggling, Ballet and Contemporary Dance)