

Benjamin Prisby

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@BenPrisby

EDUCATION

Northeastern University

Boston, MA

B.S. in Computer Engineering, GPA: 3.94, Summa Cum Laude

Sept 2015 - May 2019

- Coursework: Embedded Design, Software Engineering, Computer Architecture, Digital Logic Design, Networks, Algorithms, Database Design, Electronics, Circuits & Signals, Engineering Problem Solving, Engineering Design
- Activities: Institute of Electrical & Electronics Engineers (IEEE), Alpha Kappa Sigma Fraternity

TECHNICAL SKILLS

- Programming: C++, C, JavaScript, Java, QML, Python, SQL, HTML/CSS, Verilog, Assembly (MIPS)
- Software: Jenkins, Git, MATLAB, Simulink, PSpice, AutoCAD, SolidWorks
- OSes: macOS, Linux (Ubuntu), Windows 10/8.1/8/7/Vista/XP, FreeRTOS
- Platforms: Raspberry Pi, Arduino, ZedBoard, STM Discovery
- Hardware: Basic circuit design, soldering, multimeter, function generator, oscilloscope

EXPERIENCE

Desktop Metal

Burlington, MA

Embedded Software Engineer (Co-op → Permanent)

July 2018 - Present

- Led implementation and design refinement of second-gen Studio Printer UI, built in Qt QML using C++ and JavaScript.
- Created series of Debian packages for configuring embedded Linux base OS deployed on Studio appliances, including X server configuration, wpa_supplicant and connman networking setup, and graphical OTA update utility.
- Maintained and implemented new features and improvements in Qt-based technician tool for Studio appliances.
- Improved DevOps workflow by creating build scripts and Jenkins jobs for eight deployed software packages.

NxStage Medical

Lawrence, MA

Software Engineering Co-op

July 2017 - Jan 2018

- Added functionality to embedded product code on ARM and dsPIC systems by analyzing requirements, writing/testing new code, and running code reviews with developers before merging feature branches with trunk in SVN repository.
- Debugged and tested existing embedded product code, implementing fixes for both filed and identified bugs.
- Deployed build servers for continuous integration based on Jenkins for two different projects.
- Composed and published software design documentation for existing embedded product code.

Staples

Boston, MA / North Andover, MA

Certified Technician

Aug 2015 - Dec 2018

- Repaired and set up hundreds of computers, printers, cell phones, and other customer devices (including onsite services).
- Managed order system and ensured quality execution of EasyTech services, created loyal customers, drove store CSAT.

PROJECTS

HUDView

May 2018 - Apr 2019

- Led team in building smarter bicycle helmet featuring dual displays, GPS, RF buttons, light sensor, and accelerometer.
- Managed software architecture and component integration, team communication, and JIRA task tracking.
- Implemented sensor drivers in C and Qt C++ asynchronous control application for handling I/O data.

BCON RFID Arcade

Jan 2019 - Apr 2019

- Architected networked system of arcade games, kiosks, and servers using RFID cards for user identification.
- Implemented general and prize kiosks using Qt QML, centralized backend server using Node.js, Express.js, and MongoDB, and frontend for displaying real-time user statistics using Node.js, Express.js, Socket.IO, and Bootstrap.

Arduino Home Automation System

Jan 2015 - May 2015

- Built Arduino Uno project utilizing light sensor, PIR sensors, push buttons, clock, and wireless outlet control system.
- Programmed sketch to continuously read input data and decide to turn lights on/off, tested and debugged until stable.