# Randy K. Powell

# Software Developer

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### **EDUCATION**

Capitol Technology University Laurel, MD

BS in Computer Engineering

May 2019

GPA: 4.0

Dean's List: all semesters

## **TECHNICAL SKILLS**

Front End:

HTML, CSS, Bootstrap, JavaScript, jQuery

Back End:

PHP, Laravel, MySQL, Flask, ASP.NET Core, C#

#### **Embedded Systems:**

Raspberry Pi, Python, digital design, circuit design and analysis

Other Languages:

C++, C, Perl, Java, CLIPS, BASH

**Operating Systems:** 

Raspbian, Kali Linux, Ubuntu, Debian, Windows

**Development Tools:** 

GitHub, JIRA, VS Code, VMware, Visual Studio

### **WORK EXPERIENCE**

Visualization Web Development Intern
The Aerospace Corporation • El Segundo, CA
June 2018 - August 2018

- Developed mobile-responsive web applications using MVC methodologies with PHP, MySQL, and Laravel
- Designed user-friendly web pages using Bootstrap and jQuery
- Wrote PHP scripts to dynamically generate custom PowerPoint slide decks for R&D proposals following standard corporate templates
- Used JIRA to keep track of tasks and issues and collaborate with a team of developers in an agile environment
- Developed a comprehensive tutorial of the CLIPS programming language

# Package Handler United Parcel Service (UPS) • Laurel, MD August 2016 - May 2018

- Mentored new employees by providing advice about safety, quality, and efficiency
- Sustained positive and energetic attitude through hours of physical labor while maintaining personal safety, product quality, and work efficiency

## **MAJOR PROJECTS**

#### Duckie Rodeo HackPSU MLH Hackathon • State College, PA October 2018

- Collaborated with four students to build a customizable Raspberry Pi RC car, controlled by a web app over a local Flask server, in 24 hours
- Designed a Flask web server to serve the web app directly from the Pi, accessible from anywhere on the local Wi-Fi network
- Facilitated communications and handled commands between the hardware driver and the UI using HTTP requests
- Integrated the video stream into the UI using HTML and CSS
- Wrote two modes of operation on the hardware driver with custom video stream and command alterations using Python
- Won 2nd place overall out of 80+ teams at HackPSU, an MLH Hackathon at Pennsylvania State University

#### CACTUS I

Capitol Technology University • Laurel, MD August 2017 - May 2018

- Developed space flight software for a 3U CubeSat mission
- Developed embedded python scripts to act as a scheduler on a Raspberry Pi, in charge of calling scripts of different subsystems and seamlessly aligning the systems
- Debugged hardware and wrote python scripts to directly control different sensors using I2C and serial connections