

## Experience

### The Walt Disney Company

Orlando, FL

R&D Software Engineer - TA

Aug 2016-Present

- Engineer solutions for Internet of Things and BLE Beacon based projects
- Responsible for software and hardware engineering tasks related to R&D prototypes
- Developed lighting shows used in custom GPS-based show control system for WDW Busses
- Utilize new technologies in creative solutions to challenging problems for Disney Parks & Resorts

### The Walt Disney Company: Professional Internship

Orlando, FL

Software Engineer Intern

May 2014-Aug 2016

- Developed event playback script in node.js/Java, to simulate and analyze tests in real-time
- Built and modified iOS apps in Swift 2.0 used to determine RSSI properties for Beacon technologies
- Used Raspberry Pi and BeagleBone Black in Linux, incorporated Bluetooth low energy frameworks
- Assisted in development of a web-based app used for attraction vehicle overhaul
- Engineered software to virtually simulate hardware components in ride and show elements
- Created interactive GUIs for operator consoles in TRON Lightcycle Power Run in Shanghai

### The DiSTI Corporation

Orlando, FL

Software Engineer Intern

May 2015-Aug 2015

- Utilized GUI software and C++ on R&D team to engineer customized 3-D virtual maintenance training solutions, used in the aerospace, automotive, medical, and training industries
- Experienced working on cross-platform product (Windows/Linux) with build tools, version control, and Agile-Scrum development process

## Skills

### Programming languages:

**Proficient in** C, Java (Object-Oriented Programming)

**Familiar with** Swift, C#, C++, Python, JavaScript, jQuery, SQL, HTML5, and CSS3 Fundamentals

**Operating Systems:** Microsoft Windows (2000, XP, 7), Mac OS X (10.6-10.12), Linux (Ubuntu, Debian)

**Applications:** Xcode, Eclipse, Visual Studio, Microsoft SQL Server, MySQL, FileZilla, GIT/Subversion, Atlassian JIRA/Confluence, VMware/VirtualBox, Atom/VS Code, Terminal, Arduino

**Hardware:** Raspberry Pi, BeagleBone Black, Arduino, Beacons, Leap Motion, Soldering, 3D Printing, Laser Cutting, Lighting Control, PixLite Mk II, Medialon Showmaster, ENTTEC Pixelator

## Education

### University of Central Florida

Orlando, FL

Bachelor of Science in Computer Science with **Honors**

GPA: 3.57, Major GPA: 3.73

## Projects

### Disney Projects

- Designed front end UI for application that populates a guest list based off beacon proximity.
- Helped develop a dynamic web application used for attraction vehicle overhaul (C#, HTML, CSS, JS).
- Provided functionality to create custom ride vehicle maintenance scenarios. Application increased the throughput in Central Shops and optimized vehicle maintenance schedules.
- Assisted in development of ride and show hardware simulation to allow for pre-programming of attractions control systems using C# and ASP.NET MVC. Gained knowledge of how PLCs work.

### Leap Motion and Robotics

- Developed applications using Leap Motion as controller for Philips Hue lights and Sphero robot.
- Controlled robotic servos to match hand position in real time through JavaScript.

### Object-Oriented Software Engineering Project

- Led project team of 6 engineers to create a 2D side scrolling Java game, which incorporated enemies, character animations, and puzzles. Followed software development life cycle using Agile.

### Compiler for PL/0 Programming Language

- Wrote a fully functional compiler in C that created a lexeme list, parsed that list, and generated op code. This was read by a virtual machine, which showed the program running on the stack.

## Volunteer

Tech Behind the Dreams

Disney's Ultimate EnginEAring Exploration

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