Peyton Marinelli

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Education

BACHELOR'S IN COMPUTER SCIENCE ENGINEERING (3.63/4.0 GPA)

The University of Florida, Gainesville, Florida

May 2023

Experience

MODELING, SIMULATION, & TRAINING TOOLS INTERN, WALT DISNEY WORLD

January 2023-June 2023

Lake Buena Vista, Florida

- \cdot Developed a real-time software application using C++ that facilitated hardware-in-the-loop (HIL) simulations of rides and attractions using PLCs and simulation software
 - · Designed and developed a testing framework for the existing codebase using GTest and patched bugs as they are identified
 - · Enhanced existing software by adding new features requested by end users

RIDE CONTROL ENGINEER INTERN, WALT DISNEY WORLD

August 2022- January 2023

Lake Buena Vista, Florida

- $\cdot \ Completed\ a\ variety\ of\ projects\ using\ 2D\ modeling, HMI\ software, procedural\ documentation, and\ acceptance\ test\ procedures$
- · Performed on-site analysis and testing for various Rockwell Allen Bradley PLC projects which required troubleshooting, problem-solving, and constant attention to safety
 - · Developed a multiscreen GraphWorX HMI that interfaced with a PLC through Kepware OPC drivers

SOFTWARE ENGINEER INTERN, OCEANEERING

May 2022- August 2022

Hanover, Maryland

- · Designed and evaluated alternative GUI libraries for a cross platform topside ROV application for an exhaustive UI trade study
- · Developed and deployed a cross platform application for each of the 11 alternatives to qualify features
- · Thoroughly documented alternatives' criteria metrics and made informed decisions on down selecting after each of the 3 phases

SOFTWARE ENGINEER INTERN, UNITED KRONOS GROUP

January 2022- April 2022

Westin, Florida

- · Developed and supported internal-facing C# .Net Core application that processes tax payments for Canadian UKGPro Customers
- · Developed features for a Java Spring and Mongo application that finds discrepancies from numerous sources of tax data.

SOFTWARE ENGINEER INTERN, OPTUM (UNITEDHEALTH GROUP)

June 2021- August 2021

Hartford, Connecticut

- · Monitored and maintained in-production software that assigns agents with active jobs
- · Developed scripts and dashboards using JavaScript/React.js to improve the response time of incidents

Involvement

VICE PRESIDENT, GATOR THEME PARK ENGINEERING AND DESIGN

January 2022-Present

Gainesville, Florida

· Managed a team of 19 officers to host events featuring guest speakers, educational workshops, networking socials, professional development, design teams, and competitions for 500 total members.

LEAD DESIGN TEAM CAPTAIN, GATOR THEME PARK ENGINEERING AND DESIGN

August 2019-Present

Gainesville, Florida

- · Designing and prototyping a functional dark ride with a trackless ride system and drop tower element
- · Programming a Raspberry Pi to compute vehicle location using LPS system with ultrasonic sensors
- · Created a semester plan along with weekly meeting plans and designated deliverables to the team
- · Designed, developed, and integrated the electronics and control system for a functional scale-model roller coaster

PROJECT MANAGER/SOFTWARE ENGINEER, INTERACTIVE BATTLESHIP

August 2020-May 2021

Gainesville, Florida

- · Designed and developed a multiplayer immersive battleship board game/mobile application
- · Built and coded in python a physical battleship set with LEDs, motors, and other special effects
- \cdot Developed a mobile app in Unity (C #) and the server backend in Golang to connect devices and keep track of the game state

Technical Skills

Skills: C++, C#, Java, JavaScript, Python, MongoDB, React, Express, MySQL, SQL, Node.js, Git, Linux, Docker, Arduino, Unity, Angular, Java Spring Boot, .NET Core, Virtual Box, AutoCAD, Studio5000, GraphWorX Suite, KepWare KepServerEx