Jay Mason

2653 Caterham Dr, Waterford, MI 48329 | 586-707-2807 | masonpjay@gmail.com

Actively seeking a new role as a software engineer/software engineering manager utilizing C#/C++. Willing to relocate and authorized to work in the US for any employer. Full-Stack developer with over 8 years of programming knowledge. Quick to learn new technologies and excellent at problem solving.

Work Experience

Software Manager

General Inspection LLC – Davisburg, MI

March 2021 to Present

- Responsible for constructing and maintaining the software team
- Oversee projects and ensure projection completions
- Implemented GIT source control utilizing branch permissions
- Implemented GitHub code reviews resulting in better code readability and standard practices
- Plus, all duties from original role as Software Engineer/Service Support

Software Engineer/Service Support

General Inspection LLC - Davisburg, MI

November 2018 to February 2020

- Designed and implemented etherCAT communication for working with IntervalZero's RTX (realtime subsystem) and KINGSTAR
- Created machine simulations for multiple machine types that could simulate hardware actions such as motor movement, part tracking, digital inputs/outputs and more
- Migrated the system from MSSQL to MySQL and designed data exporting displaying statistical analysis for each measurement feature (Min, Max, Range, 6-Sigma, etc.)
- Developed a tool utilizing exported data to calculate GR&R for specific features
- Assisted service department working directly with the customers to resolve concerns/problems
- Wrote modules in C++ to control machine logic and system behavior utilizing digital inputs/outputs, etherCAT, etherNET, serial and Modbus communications
- Developed a system communicating with Pick-to-Light devices utilizing Modbus over serial
- Exposure and knowledge of FANUC robots including programming/functionality

Facility/Ride Technician

LEGOLAND Discovery Center & SEALIFE Michigan - Auburn Hills, MI

March 2016 to November 2018

- Completed weekly, monthly, and yearly preventative maintenance
- Communicated effectively with Facilities Manager about all issues and solutions
- Reviewed/completed work orders
- Designed & coded work order system that is currently used across all N.A Legoland Discovery Center's
- Troubleshooted problems with electronics/rides and worked to resolve them quickly
- Reprogrammed lighting display in MINILAND to allow for longer day cycles, shorter night cycles and sunrise/sunset lighting effects using the micro-controller
- Performed annual calibration of Kingdom's Quest and repaired laser guns

Education

Bachelor's in Engineering Management

Arizona State University - Current

Software Engineering Associates in Computer Science

Oakland Community College - 2019

Awards: Summa Cum Laude

Web Development Certificate

Oakland Community College - 2017

Awards: Summa Cum Laude

Volunteer

Oakland HOPE Technology

2020 - Current

- Designed and implemented CMS (Content Management System) written in PHP, MySQL, JS, and HTML/CSS
- Volunteers register on the system one-time and build an online profile. This profile tracks position and hours
- Created a tool that allowed previous years data to be exported from excel and put into the MvSQL Database
- System allows for tracking data, reporting and other administrative tools to help manage food pantry and thrift store volunteers