MATTHEW RYAN WATTS

317 Eastern Trail, Mukwonago, WI 53149 | (262) 894-6758 | matthew.watts.mw@gmail.com

ABOUT ME

Current computer science major with a passion for innovative problem solving. Proven to be a responsible and dedicated person with the ability to learn new concepts quickly. Aiming to bring these qualities to an internship role at your company.

EDUCATION

B.S. COMPUTER SCIENCE | ANTICIPATED MAY 2019 | UW-MILWAUKEE | GPA: 4.0

- Learning MIPS architecture and assembly programming language
- Developed an internal combustion engine analysis and training tool with intuitive user interface using MATLAB
- Designed / prototyped a portable lock for a Master Lock sponsored project. 3D printed components from ProE models

MASTER OF BUSINESS ADMINISTRATION | INVESTMENT MANAGEMENT | JUNE 2012 | UW-MILWAUKEE

BACHELOR OF BUSINESS ADMINISTRATION | FINANCE | JUNE 2010 | UW-MILWAUKEE

WORK EXPERIENCE

ENGINEERING INTERN, SYSTEMS ARCHITECT | ROCKWELL AUTOMATION | MAY 2017 – PRESENT

- Developing and architecting a full stack application to be used in manufacturing for energy analytics
- Angular 4 frontend, Node.js backend, MongoDB storage
- Built an API for use with a voice assistant using Amazon Web Services Lambda, Azure Web Applications, and Socket.io
- Communicating with automation hardware using the Common Industrial Protocol (CIP)
- Testing and improving network crawling software used to discover Ethernet devices and retrieve related information

ENGINEERING CO-OP | BRIGGS & STRATTON | NOVEMBER 2016 – MAY 2017

- Developed and implemented an integrated information delivery / retrieval system
- HTML 5 / CSS 3 / JavaScript web application using AngularJS framework
- PHP APIs to store and deliver relevant data / MySQL database storage
- Apache webserver
- Python 3 scripting on Raspberry Pis to display real-time digital standard work instructions
- Visual Basic to automate document creation

PERSONAL PROJECTS

7 LANGUAGE GAUNTLET | SEPTEMBER 2017 - PRESENT

- Learning and exploring 7 different programming languages in parallel
- Comparing fundamentals, implementation of data structures & algorithms, and standard libraries
- https://github.com/mrwatts88/CodeExercises

TARGET INTERCEPTION SIMULATION | MAY 2017 – AUGUST 2017

- Simulated the interception of a moving target utilizing both algebraic and numeric methods
- 3D modeled mechanism in Pro Engineer
- C++ with OpenCV library for object tracking and user control
- Arduino controlled mechanism
- MATLAB for modeling kinematics, performing calculations, and plotting data

ADDITIONAL SKILLSETS

- Java, C#, Microsoft SQL Server