

# LIAM M. MURPHY

liammurphy513@gmail.com

630-781-5530

**LinkedIn:** linkedin.com/in/liam-murphy-05244114b/

**Github:** github.com/lmurphy13

## EDUCATION

---

### Marquette University, Milwaukee, WI

May 2021

Bachelor of Science, Computer Science

Major GPA: 3.40/4.00

Minor: Spanish Language, Literature, and Culture

Cumulative GPA: 3.12/4.00

Master of Science, Computing

May 2022 expected

Concentration: Information Assurance & Cyber Defense

## SKILLS

---

### Programming Languages

Java, Python, C, Node.js, Scheme, ARM assembly

### Software & Tools

HTML, Gherkin,  $\LaTeX$ , GitHub, VIM, Eclipse, Linux CLI

### General

Data Structures & Algorithms, Object-Oriented & Functional Programming

### Foreign Languages

Conversational in verbal Spanish, Proficient in written Spanish

## EXPERIENCE

---

### Northwestern Mutual, Milwaukee, WI

June 2020 - August 2020

*Test Engineering Intern*

- Translated business requirements into deliverables within a Scrum/Agile development environment
- Participated in Scrum ceremonies on two Agile teams
- Developed regression testing scripts using an internal automated testing framework
- Created an onboarding application for new hires using React/Redux for Node.js

### Marquette University I.T. Services, Milwaukee, WI

September 2018 - July 2020

*Student Help Desk Analyst/Student Lead*

- Receiving and resolving issues as the first point of contact to Marquette University's IT Services department
- Tracking and responding to unresolved problems, and notifying appropriate IT Services staff as needed

### Marquette University Department of Computer Science, Milwaukee, WI

May 2019 - August 2019

*Undergraduate Research Assistant*

- Collaborated with other research students on developing the Embedded Xinu operating system
- Ported a graphics driver from the Raspberry Pi 1 Xinu build to the Pi 3 B+
- Initiated development on a shell multiplexer using a window abstraction device driver

## RELEVANT COURSEWORK

---

Data Structures & Algorithms I & II

Networks and Internets

Hardware Systems

Computer Security (**graduate level**)

Operating Systems

Compiler Construction (**graduate level**)

Programming Languages

Ethical/Social Implications of Data (**graduate level**)

## PROJECTS

---

### Functional Project Language Interpreter

August 2019 - December 2019

*Programming Languages Semester Project*

- Incorporated functional programming concepts into the implementation of a small interpreter for a small functional language
- Gained familiarity in functional programming with Scheme/Racket

### Embedded Xinu

January 2019 - May 2019

*Operating Systems Semester Project*

- Implemented integral sections of the Embedded Xinu kernel in C and 32-bit ARM assembly
- Gained experience with real multi-core operating system concepts on real multi-core hardware throughout the semester
- Continued learning and development through an undergraduate research program during the summer of 2019

## ACTIVITIES

---

Marquette University Evans Scholars, Vice President, Finance

MSCS 2019 Programming Competition - Scratch Question Writer and Judge

Association for Computing Machinery, Treasurer

Shannon Rovers Irish Pipe Band, Chicago, IL