(315) 534-5512 | peter cougan@outlook.com | petercougan.com

### Education

Syracuse University (Syracuse, NY)

May 2019

- Computer Science Major (B.S.), College of Engineering and Computer Science
- Mathematics Minor, College of Arts and Sciences

**Technical Projects** View more online at: petercougan.com/portfolio.html

### **Multi-Threaded Synchronization Routine**

October 2017

Design of Operating Systems (CIS 486)

- Implement the given synchronization analogy into an emulated machine and operating system (JNACHOS) as a kernel space procedure
- The problem consisted of an analogy in which a pool obstacle course with an arbitrary number of children, lifeguards, and obstacles are to be synchronized to successfully run all threads
- Experience gained: using Semaphores to synchronize multiple threads, general algorithm design for a multi-threaded routine, design of modern operating system components

# **Software Requirement Specification Team Project**

October 2017

Software Specification and Design (CIS 453)

- Develop a business-driven model of the team's chosen software with a completed Software Requirement Specification (SRS) document, including use-case diagrams, use-case descriptions, and activity diagrams
- Our team modeled a Student Advising System to be used as a web application in which students can
  easily schedule appointments with their advisors and also be advised by the automated system to help
  choose courses for their upcoming semester
- Experience gained: understanding software from a business perspective, modeling software with diagrams, working as a team, meeting deadlines as a long-term project

### **MIPS Assembly Merge Sort Implementation**

April 2017

Computer Design & Programming Systems (CIS 341)

- Implement a merge sort algorithm as an assembly language (MIPS) program
- An array of integers was loaded into memory, the merge sort algorithm was operated on the array, and the sorted array was printed to the screen
- Experience gained: accessing memory with registers, design of control constructs, general knowledge of logical design in assembly language, differences of programming in assembly language compared to high-level languages

#### **Technical Skills**

Languages: C/C++, Java, Haskell, PHP/SQL, HTML/CSS

Software: Microsoft Windows, Mac OS X, Microsoft Office Suite

Other: Probability & Statistics, Calculus

#### Leadership Experience

### Syracuse University Phanstiel Scholar (Syracuse, NY)

August 2015 - May 2019

- Awarded to students who have demonstrated academic success and community leadership
- Encourages and requires students to fulfill several community service projects throughout the academic year, such as fund raisers for charity organizations, mentoring local elementary/high school students, and many other opportunities

#### Junior Achievement Program (New Hartford, NY)

February 2015 – May 2015

The Hartford Financial Services Group

- Worked with a team of 20 students from nearby school districts to develop and sell our product Charger Armor, a 3D printed product that reinforces iPhone chargers to prevent tearing
- Gained experience managing a team as Vice President of Human Resources, sales, working in a professional setting, and brainstorming/innovating in a large group

#### Work Experience

## Town of New Hartford Dept. of Parks & Rec (New Hartford, NY)

May 2016 - August 2017

Laborer, Summer Worker

- Mowed lawns, whacked weeds, painted, etc.
- Gained experience dealing with time management, working in small teams, and interpersonal skills