# Sarah Pethani

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### **OBJECTIVE:**

An internship or research opportunity that will allow me to utilize my creative skills through problem solving and employ my analysis and communication skills.

### **EDUCATION:**

Carnegie Mellon University, Pittsburgh PA

Bachelor of Science in Computer Science, May 2023

QPA 3.72/4.0

Roslyn High School, Roslyn Heights, NY

Diploma with Honors and Mastery in Math and Science, June 2019

GPA 98.7/100.0

#### **PROJECTS:**

Caching Web Proxy (Summer 2020)

- Implemented web proxy in C which accepts incoming connections, reads and parses requests, forwards requests to web servers, and forwards responses to clients.
- Utilized multi-threading to deal with concurrent client requests.
- Added main memory cache of recently accessed web content for faster response time.

Personal Website (Summer 2020)

- Designed a responsive website template from scratch with Jekyll (HTML/CSS, SASS, Liquid, YAML) to construct a personal website showcasing hobbyist artwork and personal projects.

#### **EXPERIENCE:**

TeenHacks LI: Webmaster/Organizer (Summer 2018 – Spring 2019)

- Developed and maintained website for TeenHacks LI hackathon events using Bootstrap.
- Contacted companies for sponsorship and coordinated with representatives to fulfill agreements about inperson workshops, delivery of goods, and advertisement.
- Managed day-of logistics for two hackathon events (attendance of 70 and 200).

# **ACTIVITIES:**

ScottyLabs: Tech Committee Project Lead (Fall 2019 – Present)

- Modified and debugged old TartanHacks registration system made with MEAN stack.
- Communicated with design committee to revamp look and feel of registration system.
- Creating new frontend for registration system based on React/Redux.
- Analyze project progress, prioritize and delegate tasks, and meet with team to reach project deadlines.

Game Creation Society: Member (Fall 2019 – Present)

- Animated characters and character weapons for Sporshmallow based on a sports marshmallow concept.
- Collaboratively programmed Sporshmallow, a platformer 2-player fighting game, utilizing C# in Unity.

# **TECHNICAL SKILLS:**

Languages: C, HTML/CSS, Java, Standard ML, Javascript, Python

Frameworks: SASS, Bootstrap, React Other: Git, Bash, LaTeX, Vim, Unity, Jekyll

### **COURSEWORK**:

- Introduction to Computer Systems
- Principles of Imperative Computation
- Principles of Functional Programming
- Great Theoretical Ideas in Computer Science
- Mathematical Foundations for Computer Science
- Matrices and Linear Transformations
- Calculus in Three Dimensions

# **HONORS:**

- Congressional App Challenge Winner
- 3<sup>rd</sup> place at Lockheed Martin's CodeQuest in Moorestown, NJ
- Nassau County Comptroller High School Innovation Award
- Seal of Spanish Biliteracy
- National Merit Finalist
- National AP Scholar Award