

LIZ MAINS

COMPUTER SCIENCE

PROFILE

Computer science student excited to expand horizons with some experience in designing, building, and demonstrating technical skills with knowledge in multiple programming languages

EDUCATION

York College of Pennsylvania

Bachelors of Computer Science

GPA: 3.44

Expected Graduation: May 2024

Minors: Mathematics & Visual Communications

LANGUAGES

Java

C++/#

HTML

CSS

Python

SYSTEMS

Windows

Mac OS

Ubuntu

COURSEWORK

Software Engineering

Design and Analysis of Digital Circuits

Fundamentals of Computer Engineering

Networking

Cybersecurity

Analysis of Algorithms

Programming Language Design

Data Structures

Graphics

Operating Systems

Capstone (senior design)

Elements of Computer Graphics

Typography

Letterpress

ACHIEVEMENTS

Had work accepted into York's Juried Exhibition (Spring 2023)

Won Best First Hack and Best Use of Twilio at YCP's Hackathon (Fall 2022)

CONTACT

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WORK EXPERIENCE

IT Intern

Utz Quality Foods

May 2023-Present

- Self studied SQL, RESTful API,
- Built a system to route EDI files through a file architecture
- Sat in on the beginning stages to create a chatbot using Utz personas for the marketing team
- C#

Software Engineer Intern

Johnson Controls

May 2022-August 2022

- Built screen layouts for new touchscreen chillers
- Worked with a team to optimize screen layouts and efficiency
- Connected frontend values with backend data through a database
- Participated in a business proposal competition with other JCI interns
- Javascript, C++

Student Tutoring

York College of Pennsylvania

August 2021-May 2023

- Help several students develop their computer science and math skills
- Improve personal debugging skills by reading through others code
- Improve problem solving skills through explaining how to solve problems without giving away answers

Projects and Courses

Graphics

Created interactive visual programs with C

- Applied math to lighting code to create transparent objects and materials
- Created a room demonstrating all the skills learned over the semester including texture mapping, rotating and shifting objects, mirrored objects, transparent objects, light sources, and a camera moving within certain bounds

Software Engineering

Created both individual and group projects in multiple languages

- Explored Python and created a website through self taught skills
- Built a program to read from a database of emails and send a message once a day
- Worked with databases, learned how to create, edit, and pull from them
- Built a text based adventure game with a group over the entire semester

Capstone

Creating a bowling simulator/recorder web and mobile app

- Started the development of a multi year project, laid out groundwork for future developers through documentation and usage of well documented softwares
- Frontend team working on creating a webapp and mobile app that will support video analysis, simulations, and projection of bowling statistics
- Reporting to clients with weekly updates, milestones, and daily journal updates

Volunteering and Leadership

Changemakers

York College of Pennsylvania

- Lead and attend volunteer events on and off campus to improve the community
- Reach out and make connections with community partners, create projects

WiSE (Women in Science and Engineering)

York College of Pennsylvania

- Created a welcoming environment for women in STEM
- Host events for middle - high school students and introduce them to STEM projects