# William Kelly

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https://github.com/WilliamKelly00

### **Education**

## The State University of New York at Albany

May 2022

Bachelor of Science in Computer Science

GPA: 3.77/4.0

Minor: Mathematics

# **Work Experience**

**Added Dimensions** - Front-end software development intern

May 2021 - Present

- Designed and developed a responsive web page with cross-browser compatibility using React to increase web traffic by 60% in the span of 2 months.
- Aided in each step of the development process from planning to the implementation of features which impacted 50,000 users.
- Designed and implemented 20+ reusable React components.
- Wrote unit and integration tests to achieve 80% code coverage, drastically reducing errors.

#### Sounds Interiors Inc. - Web development intern

June-August 2019

- Developed and maintained a multi-page informational website about the company.
- Tested website to ensure responsiveness across multiple devices and browsers
- Aided in the hosting of the website.

# **Project Experience**

Price Tracker (JavaScript)

August 2021 - Present

- Developed a price tracking web application using React and Firebase.
- Worked with json data received from api calls and stored the data in a firestore database.
- Consumed data from Firestore in real time, allowing users to be notified of a change in price immediately.
- Enabled user authentication using google, allowing users to follow specific items using their google account.

#### Generic Priority Queue (Java)

Januar

- Implemented an abstract data type priority queue, utilizing a heap data structure created with an ArrayList.
- Optimized the time complexity of insertion, deletion, and sorting to ensure high volume efficiency.
- Utilized generics to ensure the data structure can be used with any data type.

#### Computer (Java)

October 2020 – December 2020

- Practiced object-oriented design through creating a functional computer based on a bit object.
- Designed a functional Assembler to generate longword instructions from Strings.
- Developed an Arithmetic-Logic unit allowing for mathematical operations as well as logical operations.
- Utilized ripple-addition and bit-shift multiplication to allow for complex mathematical operations.

#### Skills

Technical: Java, C/C++, JavaScript, SQL, Spring, React, Git.

Related courses: Design and Analysis of Algorithms, Database Systems, Software Engineering, Data Structures, Discrete Structures. Interpersonal: Collaboration with other developers on projects, Agile and Waterfall development, debugging various code.

#### **Activities & Affiliations**

Cyber Defense Organization- Member

September 2018 - Present

- Participated in a private Red Team-Blue Team event, assisted in finding vulnerabilities and preventing attacks.
- Learned how to detect and fix vulnerabilities in a fast-paced environment.
- Gained a deeper understanding of the Linux operating system.

#### Google Kickstart Coding Competition

April 2021

- Developed algorithmically efficient solutions, given problems and a three-hour time constraint.
- Translated these solutions into code that met the specifications provided.