# **Justin Thoreson**

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(425) 977-5521

## **Education**

M.S., Computer Science | June 2023

Seattle University

GPA: 4.0

Outstanding CS Graduate Student Award 2023 Award for Research & Collaboration in STEM Graduate Representative – Seattle University ACM

# **B.S., Computer Science, Minor in Data Science** | June 2022 Seattle University

GPA: 3.953, Summa Cum Laude

Outstanding CS Undergraduate Student Award 2022

**Relevant courses**: Computer Networks, Parallel Computing, Distributed Systems, Physical Databases, Computer Graphics, Artificial Intelligence, Software Architecture

## **Skills & Qualifications**

- C++, Python, TypeScript, JavaScript, Java, C#
- Git, Visual Studio, VS Code, JetBrains IDEs,
- Adaptability, communication, collaboration, critical thinking, problem-solving

## **Experience**

**Software Engineer** | July 2022 – October 2023 Votegrity

- Configured backend functionality to election administration tool frontend
- Modified and polished UI previously implemented during Senior Capstone Project
- Instantiated new virtual machine from scratch by upgrading existing software
- React, JavaScript, Python, Azure, VS Code

# **Software Engineer Intern** | June 2022 – May 2023 T-Mobile

- Codified architecture for scalable and automated API authentication and authorization assessment tool
- Configured multi-project CI/CD pipeline via YAML that helps several teams test APIs for authorization
- Submitted patent application for API assessment tool
- TypeScript, NodeJS, SQL, Postman, VS Code, GitLab

# **Tutor, TA, Grader – Computer Science** | June 2021 – June 2022 Seattle University

- Algorithms and Java programming courses
- Tutored and graded 100+ students, formulated grading rubrics alongside several other TAs
- Provided constructive feedback to students via tutoring and grading
- Java, IntelliJ, Vim, Emacs, GitHub

## **Projects**

### Web Proxy

- Implemented HTTP request forwarding to origin servers via TCP connections
- Codified web page caching for successful HTTP responses
- Created and parsed HTTP requests and responses
- Python, Git, VS Code

### K-means Clustering on MNIST Dataset Using MPI

- Clustered images of handwritten digits via Euclidean distance of greyscale pixel values
- Optimized clustering of images via parallelization using Message Passing Interface (MPI)
- Visualized similar digits via generating dynamic HTML output file
- C++, OpenMPI, HTML, Make, Valgrind, VS Code

### **DBMS Relation Manager**

- Codified key Relational Database Management System (RDBMS) features and requirements
- Utilized open-source software for SQL parsing and file management
- Debugged C++ errors and memory leaks via Valgrind
- C++, Make, Valgrind, Git, VS Code

### **Portal Illusion**

- Created a computer graphics illusion of a cube passing through a portal
- Utilized custom computer graphics framework
- Implemented shaders, textures, particles, and audio output
- C++, GLSL, OpenGL, Visual Studio

#### **Votegrity SaaS Solution**

Senior Capstone Project – Seattle University Sponsor: Tom Thomas – Votegrity CEO

- Collaborated with capstone team to design an election administration UI
- Communicated with sponsor to create UI wireframes
- Codified election administration UI by establishing foundation for critical functionality
- React, JavaScript, NodeJS, VS Code, Figma

#### **Image Processor API**

- Utilized a RESTful API to process image transformations
- Created with emphasis on architectural design patterns
- C#, Python, TypeScript, React, Flask, REST, VS Code

#### React Portfolio | exulgor.com

- Created my own personal portfolio website
- Deployed site build to the web via GitHub Pages
- Configured UI to be accessible on desktop and mobile
- React, TypeScript, NodeJS, GitHub, VS Code