

# Josh Abbott

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## EDUCATION

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### Bachelor of Science in Computer Science, Minor in Mathematics

May 2025

Washington State University, Pullman, WA | President's Honor Roll

Relevant Coursework: Web Development, Database Systems, Computer Networks & Security, Machine Learning, Data Science

## TECHNICAL SKILLS AND CONCEPTS

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**Languages:** TypeScript, JavaScript, Python, C, C++, C#, R

**Web & Database:** React, Next.js, TypeScript, HTML/CSS, Storybook, Bootstrap, Tailwind, SQL, MySQL (MariaDB)

**Tools & Concepts:** Git, Linux (Ubuntu), Agile/Scrum, OOP, Unit Testing

## EXPERIENCE

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### IT Developer – Select Site Acquisition | Remote

2025

- Enhanced an existing internal web application by implementing 10+ new database-backed search tools and quality-of-life improvements to streamline daily workflows
- Refactored backend logic and database interactions across multiple modules to improve code maintainability and prepare the system for future scalability

### Freelance Developer – Roblox | Remote

2016 – Present

- Co-created, programmed, and promoted a Roblox game with 2.1 million+ unique play sessions and ~600 peak concurrent players, managing end-to-end development from design to release
- Built scalable Lua systems for 25+ games with 100 million+ play sessions, leading project coordination and developing multiplayer systems (up to 50 players) and user data pipelines in Roblox Studio
- Increased ad clickthrough rates by up to 50% through A/B testing and data-driven iteration on platform-based advertisements viewed by millions

### Teaching Assistant – Washington State University | Pullman, WA

2024

- Advised 150+ undergraduates during Spring and Fall semesters through weekly office hours, offering support on debugging, syntax, and core problem-solving in an introductory C++ programming course
- Led weekly in-person lab sessions for a cohort of 18 students each semester, delivering hands-on instruction and reinforcing key programming concepts through real-time support

## PROJECTS

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### Inventory Tracking System | Capstone Project | JavaScript, SQL, Express

2024

- Refactored and scaled an inventory system built with Express and PostgreSQL for 138 AgWeatherNet stations, collaborating in an Agile team of 3 to improve reliability and functionality
- Led the design and implementation of a responsive, branded interface spanning 20+ pages, adhering to strict design guidelines to ensure consistency, accessibility, and cross-device usability
- Created secure, RESTful authentication and role-based authorization system with JWT; applied networking principles from CS coursework to manage user sessions and API security

### Location Data Analysis | Python, R, SQL

2024

- Built a scalable pipeline to efficiently process and analyze over 13,000 Google Location History JSON entries using Python, R, and SQL alongside a teammate
- Implemented custom extraction, data cleaning, and confidence-based filtering logic to aggregate high-quality data into a structured SQLite database
- Visualized data to discover movement patterns and behavioral shifts during the COVID-19 pandemic using R (ggplot2, leaflet, kmeans) and Python (seaborn, pandas) to create graphs, cluster maps, and heatmaps

### Yelp Data Search Application | Python, SQL

2025

- Assembled a Python tool to analyze Yelp's large-scale business data using PostgreSQL, applying JSON parsing, schema design, and query optimization to extract location-based insights
- Engineered and executed SQL ranking algorithms to sort over 11,000 businesses and 1M+ data points by popularity and success metrics for comparative analysis