Karandeep Singh Sangha

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Education

- **University of Washington** — Tacoma, WA
  Bachelor's of Science in Computer Science; GPA: 3.98 — *Oct. 2022 – Mar. 2024*
- **Tacoma Community College** — Tacoma, WA
  Associate's of Science in Computer Science; GPA: 3.91 — *Apr. 2021 – Sept. 2022*

Experience

- **Patterson Logistics** — Kent, WA
  Traffic Clerk — *Aug 2020 – July 2022*
  - **Process Optimization**: Identified and implemented workflow improvements, increasing productivity by **15%**.
  - **Leadership**: Supervised a team of **10**, fostering a culture of continuous improvement to meet tight deadlines.
  - **Technical Enhancement**: Automated routine reporting tasks using **Python** and **SQL**, streamlining operations and reducing manual errors.

Projects

- **Netflix-Inspired Streaming Platform**: January 2024 – Present
  - Built a Netflix clone using **React.js** for the frontend and **Node.js** with **Express.js** for the backend.
  - Integrated **TMDB API** to fetch dynamic movie and TV show data for trending, regional, and genre-specific content.
  - Implemented multi-language support (English & Spanish) and user authentication with **MongoDB**.
  - Ensured a fully responsive design using **TailwindCSS** and state management with **Zustand**.
- **Decked Out 2 – Web Game Development Project**: January 2024 – March 2024
  - Developed a "3D" isometric adventure game using **JavaScript**, **HTML5**, and the **Canvas API**.
  - Designed intelligent AI systems for enemy behavior using **event-driven programming**.
  - Added a difficulty system and **CSS3 animations** for immersive effects.
- **Library Management System Application**: January 2024 – March 2024
  - Built a Library Management System to track books, manage members, and process transactions.
  - Leveraged **Java** and **SQLite** to design concurrent data operations.
  - Applied **OOP principles** to create modular, scalable code.
- **TLQ Pipeline – Cloud Computing**: September 2023 – December 2023
  - Analyzed data efficiency in a TLQ pipeline on **AWS Lambda**, comparing **x86** and **ARM processors**.
  - Managed data extraction from **AWS S3** and optimized performance using **Java Maven**.
  - Benchmarked pipeline performance for Transform, Load, and Query processes.

Programming Skills

Programming Languages: Java, Python, JavaScript, C, C++, C#, SQL

Web Development: React.js, Node.js, Express.js, MongoDB, TailwindCSS

Cloud Technologies: AWS, GCP, Azure

Tools/Technologies: JUnit, Git, Visual Studio, IntelliJ, CI/CD

Concepts: Agile, OOP, Cloud Computing, Software Testing