

BALPREET MANGAT

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SKILLS

- **Programming Languages:** C/C++, TypeScript, HTML/CSS, Python, SQL, Java/Java FX, R, JavaScript, Clojure/ClojureScript, Bash
- **Tools/Frameworks:** PostgreSQL, AWS (Lambda, Step Functions), DynamoDB, Angular, Re-frame, Bootstrap, Jest, Git, Docker, Kubernetes

WORK EXPERIENCE

SSENSE, Software Developer (Inventory Management Team, Operations)

May 2021 – Present

- Deployed efficient **AWS Lambda** code in **Typescript** with **DynamoDB** to resolve bugs in shipment UI and added new features to **AWS state machines**, minimizing human errors and manual work at distribution centers
- Actively employed **agile** methodology by participating in daily **scrum** meetings, **retrospectives**, and demo presentations, strengthening communication skills, **code comprehension** and self-reflection for future sprints
- Exercised **test-driven development** by completing **end-to-end testing** (**Jest**, **nock**, **zephyr**) to ensure high quality, robust code
- Contributed to new Inventory Management System through workflow charts, and discussions regarding DBMS compatibility and software architecture in reference to **Domain Driven Design**, refining understanding of software principles

Synqrinus, Full Stack Developer

January 2021 – April 2021

- Maintained and improved existing features and tools for various backends built in **Clojure**, **Luminus** framework and **PostgreSQL**, enhancing usability of graph building application for data analysts
- Developed new UI features for internal **front-end tools** using Clojure, **Reagent** and **React** through **Re-frame** for analyzing customer interactions with mock products, consolidating accuracy of market research results
- Contributed to refinement of survey hosting platform built in Clojure through frequent bug fixes and upkeep

Siva Creative, Web Developer & Designer

May 2019 – August 2019

- Transformed high-level digital designs into user-friendly websites for clients using **front-end development** tools - **HTML**, **CSS**, **WordPress**, and **Bootstrap** to ensure responsivity and mobile-friendly components
- Streamlined **web development processes** by optimizing website turnaround times and client requests, decreasing project time estimations by 10%, while balancing shifting priorities in a **fast-paced environment**

EDUCATION

Candidate for Bachelor of Computer Science, University of Waterloo

September 2018 – April 2023 (Expected)

- Relevant Courses: Object-Oriented Software Development, Data Structures, Algorithms, User Interfaces, Operating Systems
- Specialization: Human-Computer Interaction

PROJECTS

SketchIt, Personal Project

November 2020

- Created a desktop **vector-drawing program** where users can select shapes to draw, select their properties and draw on-screen along with other features including standard tool palettes, cut-copy-paste, and saving/loading drawings
- Constructed the interface and functionality using **Java/Java FX** components and layouts to ensure intuitive, interactive features

RAInet, Group Project

December 2019

- Developed a two-player desktop game application, similar in style to Stratego, using modern **C++** libraries (**STL**)
- Conceptualized and designed a solid **object-orientated** program, with advanced knowledge and considerations for program **resiliency**, **design patterns** (Factory Design Pattern, Observer Pattern, Non-Virtual Interface) and **encapsulation** of data
- Collaborated with team to create the **front-end** of web application using XWindow, allowing for interactive graphics

VOLUNTEER EXPERIENCE

UWaterloo Women in Computer Science Club (WICS), Volunteer & Mentor

January 2020 – Present

- Organized events for female students in Computer Science to promote gender equity and foster supportive school environment
- Refined leadership and interpersonal skills through WICS mentorship program and orientation events by sharing anecdotal experience, and helping students identify and achieve school/personal growth goals through consistent, long-term communication

Rise Above Adversity, Co-Founder and Director of Events

June 2018 – September 2019

- Founded a non-profit organization with the primary goal of increasing community awareness amongst youth through planned events and interactive conferences alongside Peel School Trustees and Members of Parliament
- Reached out to 200+ youth in the GTA to promote social justice and connected 45 youths to volunteer locations