

Saad Ahmad Usmani

672-667-0450 | Email | LinkedIn | Portfolio Site | GitHub

TECHNICAL SKILLS

Languages: Java, JavaScript, TypeScript, Python, C#, C/C++, SQL, JSON, HTML/CSS, R, Swift

Frameworks: React, Vite, Node.js, Next.js, Flask, Express.js, FastAPI

Developer Tools: Git, Docker, TravisCI, Google Cloud Platform, Firebase, Supabase, Vercel, IntelliJ, Netlify, Eclipse

Libraries: pandas, NumPy, Matplotlib, React Router, Tailwind CSS

EXPERIENCE

UI Designer / Research Assistant

Jan 2024 – April 2024

SFU Sports Analytics Group

Burnaby, BC

- Designed and implemented the new website for the SFU Sports Analytics Group, using the AEM web manager, and leveraging my front-end development skills
- Deployed site, and configured search metrics with Google Search Console for optimal search visibility

Head of Combat Systems / Backend Developer

Nov 2024 – Dec 2024

Horizon Expedition

Burnaby, BC | Remote

- Developed the combat system mechanics, using C# scripting for Unity, for a multiplayer-online extraction shooter called Kingdom, that is a work in progress
- Contributed 400+ lines of code to an established codebase via Git, leveraging my game-dev and backend technologies experience to deliver a synchronized combat system to players in real time

Coding Tutor for DSA and Intro to Computer Systems Course

Jan 2025 – Present

SFU Peer Tutor Program

Burnaby, BC

- Taught concepts such as memory management, multi-level caches, RISC-V ISA, pipelining, among various others for CMPT 295 — Introduction to Computer Systems Course
- Taught concepts such as implementations of various data structures, object-oriented programming, time and space efficiency, among various others for CMPT 225 — Data Structures and Algorithms Course
- Mentored undergraduate tutees on solving coding assignments, in addition to debugging and optimizing code.

PROJECTS & TECHNICAL ACTIVITIES

AutoBoat | Project for RIT University Machine Learning Competition — Dubai, UAE

Nov 2022

- Developed C code for an autonomous boat built on an Arduino frame by implementing dynamic path correction algorithms to minimize traversal time. Team's boat achieved 3rd fastest race time

ESFL | Project for Compass Hackathon — Abu Dhabi, UAE

June 2024

- Developed an NFT marketplace of E-Sports collectibles attached to an E-Sports Fantasy League application, to enhance the Compass (gaming organization) ecosystem. Integrated Web3 Components, such as NFT minting using Cartesi framework. Nominated for top 10 finalists.

HeatSpace | SFU JourneyHacks Hackathon Winner — Burnaby, BC

Feb 2025

- Developed a smart heat optimization system that simulates heat propagation to determine optimal heater placement in rooms. Leveraged conversion of 3D USDZ model to 2D floor plans. Placed 1st overall.
- Employed React.js 'I&' Tailwind CSS for frontend, and Flask integrated with OpenCV 'I&' NumPy for backend, using Gaussian Decay Model 'I&' k-D Tree search algorithm for optimizing heater placement.

TabMark | Website Link

Feb 2025 - Present

- Lead development of a full-stack project management web application using React, Tailwind CSS, Firebase (Firestore, Authentication, Storage), and SendGrid API, enabling users to organize windows of tabs as projects, receive daily reminders for urgent tasks, and weekly congratulatory emails for completed projects.
- Built a custom Chrome extension leveraging the Chrome Tabs API to save and reopen browser tabs directly linked to projects, seamlessly integrating with the web app via Firebase for real-time data synchronization.

EDUCATION

Simon Fraser University

Aug. 2023 – May 2027

Bachelor's in Computing Science, Minor in Statistics — CGPA: 3.90

Burnaby, BC

Spring 2025: President's & Dean's Honour Roll

Summer 2025: Undergraduate Open Scholarship