

Soham Parmar

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Personal Website: sohamparmar.com [Built with ReactJS & is hosted on Heroku]

SUMMARY OF QUALIFICATIONS

Languages	C++, C#, HTML, JavaScript/TypeScript, CSS, Python, Swift, Assembly, SQL
Tools/Libraries	ReactJS, NextJS, Vercel, NodeJS, ExpressJS, Google Cloud Platform, Azure ML, Linux, REST APIs, VSCode, Git, Heroku, XCode (Swift), React Native, Flutter, Replit, Postman, Jira, Raspberry Pi

EXPERIENCE

Year Zero Studios – Software Developer

January 2022 - April 2022

- Worked with product managers using Agile Software Development principles to significantly improve upon a **NextJS SSR ReactJS web app** that allows wellness instructors to display their offerings on their custom personal page
- Coded numerous frontend features that integrated with GCP (Firebase) backend logic to improve user experience
- Led the migration from Firebase to Cloudinary for image storage to eliminate cloud image bucket costs **completely**
- Spearheaded the expansion of User Authentication to integrate Facebook into the available methods of authentication
- Created and integrated a custom infinite scroll hook that detects when the user reaches the bottom of the page, and then procedurally loads more offerings. Reduced the page load time of the most visited wellness page by 56%

PROJECTS

Peak Gaming (peakgaming.ca)

NextJS, ReactJS, Vercel, REST APIs, Firebase

- Co-founder of a fair, free-to-play video game tournament service that brings competitive gaming to casual players
- Achieved >100 people on the waitlist on day of launch
- Led design and development of the service and created a **Responsive NextJS Statically Rendered React App** hosted on **Vercel** and connected to a **Firebase** backend
- Utilized Google OAuth to authenticate Peak Users and a Firestore NoSQL database to store tournaments, along with tournament business logic being handled using serverless Google Cloud Functions

MNIST Neural Network

Python, NumPy

- Programmed a custom **Deep Neural Network** to recognize and classify handwritten digits from the MNIST Dataset with ~92% accuracy
- Does not use high-level third-party AI/ML libraries, opting instead to create a fully-connected Neural Network from scratch consisting of one hidden layer, ReLU & Tanh activated nodes for forward propagation, and gradient descent calculations for back propagation

Programmable breadboard 8-bit computer

- Constructed an 8-bit breadboard computer using **logic gates** and other **integrated circuits**, complete with registers, RAM/ROM, 7-segment displays, binary counters, CPU clock (max 500Hz), and an Arithmetic Logic Unit
- I/O includes DIP-switches, LEDs and a 4-digit, 7-segment display used for displaying values from 0 to 255 or -127 to +127. The programs are entered with 8-bit instructions (4-bit operation, 4 bit-operand)
- Successfully tested various programs such as Addition, Subtraction, Multiplication, Fibonacci sequence, and Counting

CERTIFICATIONS

Bloomberg Certified: Bloomberg Market Concepts

Issued March 2022

- Gained Knowledge in Bloomberg Terminal usage, Economic Indicators, Currencies, Fixed Income, and Equities

Microsoft Certified: Azure AI Fundamentals

Issued October 2020

- Gained Knowledge in ML principles, Computer Vision, Custom Vision, NLP, and Conversational AI

EDUCATION

Candidate for Bachelor of Applied Science (Computer Engineering) - Seeking Fall 2022 CO-OP Opportunities

University of Waterloo, First Year, Expected Graduation: April 2026 – *Dean's Honours List for Fall 2021 Term*

Waterloo, Ontario