

ANMOL TYAGI

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SKILLS

Languages: C++, Java, Python, JavaScript, TypeScript, HTML, CSS, SQL

Frameworks: React.js, Next.js, Node.js, Express.js, Java Spring Boot, Java Swing

Technologies: Google Cloud Platform, AWS (S3), Docker, PostgreSQL, Web3, Firebase, RESTful APIs, Git, Postman

EXPERIENCE

Software Engineer Intern | **Postalgia** - Toronto, Ontario

May 2022 – August 2022

- Led development of proprietary full stack application using a **RESTful API architecture** via a Java Spring Boot backend interfacing with a **React.js and Typescript** frontend, responsible for operating over **50+** machines
- Implemented an internal error alerting software by querying an internal **NoSQL** database via a DAO design pattern, which led to preventing over **40%** cascading failures and reducing machine downtime by over **18%**
- Developed cross team **synchronization** feature for internal database of **35,000+** G-code data commands via **AWS S3**
- Created standalone parser for **100,000+** daily data entries via Google App Script increasing processing time by **60%**
- Added various features such as notification logging, statistic tracking, and local data persistency across numerous internal software applications using Typescript and React.js to improve application performance

Co-Founder & Software Developer | **CodeStake (codestake.ca)**

June 2022 – Present

- Co-founded a competitive programming platform for users to earn cryptocurrency by winning head-to-head contests
- Developed a fully responsive web application hosted on Vercel using **Next.js and React.js** to incorporate **SSR**
- Integrated the Web3 API for users to connect and authenticate cryptocurrency wallets such as MetaMask and Coinbase, for effortless and secure transactions upon win conditions via smart contracts built with Solidity
- Implemented Google OAuth to authenticate users within a **NoSQL** database by integrating the **Google Firestore SDK**
- Utilized **GCP** to maintain user database and to support scalable code execution via open source library Judge0
- Accumulated over **60+** users within an ongoing beta version of the platform

PROJECTS (MORE AT ANMOLTYAGI.COM)

UCart - Online Store Inventory Management App | *JavaScript, PostgreSQL, Express.js, React.js, NodeJS - PERN* **July 2022**

- Built a full stack online store inventory management application with CRUD functionality using a PostgreSQL database to allow users to track their store inventory
- Utilized React.js to create a user interface connected with an Express.js backend to send HTTP requests to manipulate data within a PostgreSQL database hosted on Heroku, allowing users to manage inventory with ease

Face Mask Detection Software | *JavaScript, Tensorflow.js, HTML*

Jan 2022

- Developed an app that uses Face-API.js (built on Tensorflow.js) that detects whether users are wearing a face mask with an accuracy rate of **87%**
- Integrated face detection and employed Machine Learning concepts such as Supervised Learning and Neural Networks for facial classification

JamHacks 5 - University Acceptance Predictor | Python

Sep 2021

- Developed a web application that uses a linear regression model to predict user's probability of receiving an offer of admission to uWaterloo computer science and engineering programs with an accuracy rate of **92%**

A Star Path Finding Visualizer | Python

July 2021

- Built a visualizer using PyGame that displays the most efficient path between 2 user chosen points on a 2-D matrix

EDUCATION

University of Waterloo

Sep 2021 – May 2026

Candidate for BAsC in Computer Engineering - President's Scholarship of Distinction

Waterloo, Ontario