

# Ojas Singh

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## Education

### University of Toronto

Expected Graduation: Dec 2024

*Honours Bachelor of Science (HBSoc) – Computer Science, Mathematics, Statistics*

**Awards:** Admission scholarship worth \$1,500.00 CAD

**Certifications:** React the Complete Guide (Udemy), The Complete Web Development Bootcamp (Udemy), Scaleable Machine Learning on Big Data with Apache Spark (IBM), Machine Learning for Python (IBM)

## Technical Skills

**Languages:** Javascript, Python, Go, Typescript, HTML, CSS, Java, Kotlin, C, C++ Bash, SQL

**Technologies:** React, Node.js, Firebase, Express.js, MongoDB, PostgreSQL, Springboot, Django, Docker, AWS, Git, Jira

**Concepts:** Websockets, APIs (REST, GraphQL), Agile, Scrum, DBMS, CI/CD, OOP, Test-driven development, Software Lifecycle

## Experience

### Web Developer

Jun 2022 – May 2023

*University of Toronto Scarborough*

*Toronto, ON*

- Developed a web application using **JavaScript** and **Next.js** for **2000+** University of Toronto students.
- Created event tracking system with **Firebase**, enabling efficient event management and user engagement.
- Implemented **Stripe** payment integration, resulting in over **\$1000+ revenue**. Achieved exceptional website performance (**<300 ms load time**) and optimized asset storage for efficient bandwidth utilization (**<1GB/day**).
- Led cross-functional collaboration with **4 departments**, ensuring effective **communication**.
- Managed end-to-end app monitoring, utilizing Checkly, and deployed to Vercel for seamless hosting and **scaling**.

### Machine Learning Engineer Intern

Aug 2020 – Dec 2020

*Omdena*

*Singapore, SG*

- Collaborated with a **25-person** team to identify regions of economic well-being in India with satellite imagery.
- Processed over **100,000+** data points through **Python** and **scikit-learn**, employing data cleaning, refactoring, and standardization techniques. Implemented Principal Component Analysis to compress a **12-dimensional** parameter space to **3 dimensions**, enhancing visualization.
- Led a sprint with **5 engineers**, serving as scrum master and utilizing Jira for **agile** project management.

## Projects

### Finance Dashboard | *Typescript, React, Express.js, Prisma, MySQL, Docker*

(GitHub repo [🔗](#))

- Engineered a finance dashboard with Next.js and TypeScript, aggregating real-time data of **5000+** stock indices.
- Employed **Prisma** and **MySQL** to manage user data, storing wishlists and articles for **200** mock users, and containerised the application with **Docker** to run the MySQL database locally.
- Added visualisation of daily charts and news, offering actionable insights with OpenAI **GPT-3.5**.

### Broadcast - A Social Media App | *Go, Gin, Typescript, React, MongoDB, Websockets, Docker*

(GitHub repo [🔗](#))

- Architected a real-time chatting application in **Go** and Typescript, utilising **Next.js**, **Websockets**, and **Gin**.
- Performed thorough **end-to-end tests** in Typescript by leveraging **Cypress** to attain **90%+ test coverage**.
- Constructed **20+** React components, fallback pages, routes, and other functionalities for a clean user experience.

### Sentiment Analysis Blog | *Typescript, Tensorflow, React, GraphQL, AWS*

(GitHub repo [🔗](#))

- Built an application in Typescript using Tensorflow.js, Next.js, and **AWS Amplify** for sentiment analysis.
- Utilized Tensorflow.js's text toxicity model to improve content safety, offering toxic and obscenity probabilities.
- Crafted efficient **GraphQL** queries via AWS AppSync for **S3 bucket** data, managing **1000+** requests.

### Space News App | *Javascript, React, Tailwind, Vercel, NewsAPI*

(GitHub repo [🔗](#)) (Website [🔗](#))

- Developed a web app in Javascript using **Next.js** to track upcoming space launches and related news.
- Dynamically rendered content pages from **500+** fetched promises from employed APIs and **React**.