Palaash **Kolhe**

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Skills

Languages: Java, JavaScript, C, C++, C#, Python, SQL, HTML, CSS, SCSS
Technologies: Spring, Node.js, MongoDB, Firestore, Micronaut, Express.js, ASP.NET, React.js, OpenCV
Infrastructure: AWS, Google Cloud, Docker, Terraform, Git, Jenkins

Education

University of Waterloo
Waterloo, ON

Bachelor of Software Engineering (3rd year) *2020 – 2025*

Experience

Zynga Inc.
Software Engineer Intern - Payments Team *Sep 2022 – Present*

- Conceived process of requeueing **dead letter queue SQS** items through a **Java** based **Jenkins job** while maintaining **0%** item duplication rates. Wrote technical specs and held internal review meetings for this feature.
- Built server components that integrated revenue portals such as Apple Pay using **Java**, **JavaScript**, and **AWS** technologies.
- Automated deployment processes for feature branches by creating **Jenkins pipelines** to simplify workflows.
- Improved the performance, efficiency, and stability of payments services that fulfill **1,000,000+** API requests daily.

Ford Motor Company
Software Engineer Intern *Jan 2022 – Apr 2022*

- Developed asynchronous RESTful **microservices** using **Java Spring Boot** to publish critical alarm events to **5 teams**, utilizing the **GCP Pub/Sub message broker**.
- Optimized outdated infrastructure by using the **Micronaut** framework with GraalVM within the Connectivity Dashboard's data visualization system, reducing server response times by **77%**.
- Engineered a **Pub/Sub topic subscriber** service using Spring and Terraform to consume and store published messages in SQL-based Datastore DB with **0% message loss rate**.
- Created **Docker images** for microservices and performed Docker container based deployments to **AWS ECS** and **GCP Cloud Run**.
- Implemented unit and integration test cases using **JUnit** and **Mockito** to follow **test-driven development** process.

Utradea
Software Engineer Intern *May 2021 – Sep 2021*

- Implemented **sentiment analysis** using winkJS (**NLP** library) and **Node.js** to analyze **10,000+** social media posts per day and quantify community sentiment surrounding stocks.
- Led and built full-stack portfolio balancing tool using the **MERN stack** and linear algebra computation libraries to allow the user to realign the weightings of their assets, **increasing user traffic by 13%**.
- Developed various **RESTful API endpoints** using **Axios** (promise-based HTTP client), to fetch data and update the **MongoDB**.
- Designed and created server-side web application logic using **Node.js** that integrated the app with other third-party web services such as **Facebook's Graph API**.

Projects

Chess Engine
Jun 2022 - Aug 2022

- Collaborated on a **3-person** team to create an interactive chess game engine using **C++** foundations.
- Utilized the **observer** and **decorator design pattern** to accelerate the chessboard architecture development.
- Applied **OOP** concepts such as **abstraction, encapsulation**, and **inheritance** to increase modularity and strengthen security.
- Constructed a **GUI** using an **SDL** wrapper, implemented a 4-level CPU player for the engine, and managed **memory**.

Meal Drop
Jan 2022

- Engineered a **full-stack** app utilizing the **MERN** stack to create a pickup scheduling platform to mitigate food waste problems.
- Designed scalable data schemas implementing **Node.js** and **MongoDB** to store critical data.
- Created API layer using **Express.js** and **Node.js** to accept **CRUD** requests for pickup postings.

Carbon Neutral Shipping App
Dec 2021 - Jan 2022

- Built a web app using **C#** and **ASP.NET MVC** to track carbon emissions from package-based delivery.
- Implemented an object-database mapper using the **Microsoft Entity Framework** to maintain and enhance the data framework.