# Pranjal Rane

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### EDUCATION

## Northeastern University

Master of Science (MS.) Computer Science

Sep. 2022 - May 2024

Boston, MA

# Vishwakarma Institute of Technology

Bachelor of Technology (BTech.) Computer Engineering

Pune, India

Aug. 2022 - May 2022

## Experience

### Software Development Engineer I - Intern

May 2023 - Jan. 2024

Cummins Inc. Columbus, IN

- Developed and deployed over 10 RESTful APIs using the MERN stack, leading to a 20% enhancement in application efficiency and supporting scalable functionality in key web services
- Collaborated with a team of front-end developers and project managers, resulting in a 15% increase in user experience satisfaction and system reliability through seamless integration of backend APIs with front-end interfaces
- Optimized MongoDB queries and Node is server logic, achieving a 25% reduction in response times and a 15% increase in transaction processing speed, significantly improving backend performance
- Resolved multiple major technical issues, leading to a 30% increase in system stability and enhancing overall performance

# Software Development Engineer - Intern

Jan. 2022 - Aug. 2022

Mindbody Software

Pune, India

- Devised proof of concept for a tool to allow over 50K customers to create static web pages with help of pre-designed templates using React JS, ASP.NET and MongoDB. Developed RESTful APIs for efficient data interaction with MongoDB
- Revamped the Booker software's purchase experience UI using new React JS components based on modern UX principles, resulting in a 9% decrease in payment checkout time

# Software Development Engineer

Jan. 2021 - Jan. 2022

Solocl Technologies

Pune, India

- Developed the MVPs of two production-grade mobile applications in Flutter, successfully deploying them on the Google Playstore
- Enhanced user login efficiency by 15% by implementing improved cloud based authentication and user session management
- Reduced latency by 20% through URL-based deep linking and database-driven pagination, enhancing app navigation and data retrieval
- Increased user revenue by 9% with Paytm API integration, enabling diverse payment options like credit/debit cards and digital wallets

### Projects

### Video Streaming Service | Javascript, AWS (S3, DynamoDB, Lamda, CloudFront), Kafka

- Increased concurrent upload capacity by 30% and reduced processing time, by integrating AWS SQS for efficient video uploads to S3
- Reduced data synchronization time by 15% using DynamoDB and Lambda, enhancing event-driven features and real-time handling
- Introduced real-time alerts for video creators via Kafka, thus increasing user engagement in terms of comments and likes
- Enhanced video playback quality by coupling AWS S3 with CloudFront, ensuring high-quality content delivery to end-users

### CROWD - A Social Network Application | MongoDB, Express.js, React, Node.js (MERN) | GitHub

- Built a full-stack social media application using MERN stack, enabling user registration, secure login, and dynamic real-time updates.
- Designed a responsive frontend with engaging user experience with ReactJS; integrated with Express is API for handling user activity.
- Utilized MongoDB's NoSQL flexibility for efficient, scalable management and quick retrieval of user data, posts, and comments.

### Stock Portfolio Management | MongoDB, Express.js, React, Node.js (MERN) | GitHub

- Developed a real-time stock portfolio management application in Java, achieving robust and scalable design by implementing MVC architecture with design patterns like Factory and Singleton, adhering to SOLID principles
- Attained 97% code coverage and minimized potential defects by rigorously writing JUnit tests for functionality testing
- Ensured efficient data caching and accessibility by fetching real-time stock data using the Alphavantage API, storing it in SQL, and employing programming constructs like stored procedures, functions, and triggers

## TECHNICAL SKILLS

Programming Languages: Java, Python, Javascript, C/C++, C#, Dart (Flutter), HTML/CSS, PHP, SQL, Typescript

Frameworks: React, Node.js, Flask, Django, Express.js, MapReduce, Hadoop, ElasticSearch, Spark, GraphQL, TensorFlow, PyTorch

Database Technologies: MySQL, Microsoft SQL Server, SQLite, MongoDB, Amazon DynamoDB, Amazon RDS, Databricks Lakehouse Tools & Technologies: Git, Postman, AWS (EC2, S3, Route53, IAM and more), MySQL, Docker, Kubernetes, Azure, Databricks Cloud