# **Ekam Singh Chahal**

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#### **EDUCATION**

Northeastern University Boston, MA

Master of Science in Computer Science, GPA: 3.96/4.00

Sep 2022 - May 2024

Relevant Coursework: Distributed Systems, Web Development, Database Systems, Machine Learning

Jaypee Institute of Information Technology

Noida, IND

Bachelor of Technology in Computer Science, GPA: 9.40/10.00

Jun 2016 - Jun 2020

Relevant Coursework: Data Structures & Algorithms, Operating Systems & Compilers, Computer Networks

# PROFESSIONAL EXPERIENCE

## **Northeastern University**

Boston, MA

Algorithms & Java Software Assistant

May 2023 – May 2024

- Directed students on algorithm design and object-oriented programming, resulting in a 20% rise in course grades.
- Enacted a constructive feedback system, resulting in a 30% increase in positive course evaluations; mentored over 100 students in programming languages such as **Java & C++**.

Amazon Bangalore, IND

Software Development Engineer

Dec 2021 – Jun 2022

- Drafted and wrote comprehensive **technical documentation** for the Chewbacca migration project, focusing on the SPC page's **payment product** feature in the UK market, serving a customer base exceeding 4 million.
- Integrated SPC system with CBCC cards for Amazon's UK payments market using **Java** on **AWS** and **agile** practices, collaborating with financial institutions like Barclays, resulting in revenue generation exceeding \$40 million.
- Formulated approach and resolved two consumer **Java** bugs in the NxEPP Germany market, affecting over 1 million users.
- Resolved 2 Sev-2 tickets in on-call rotation, actively engaged in system design, **testing**, **architecture planning**, and **code reviews** to ensure a 10% increase in system stability and reliability.

Oriserve Noida, IND

Software Engineer

Jul 2020 - Dec 2021

- Restructured and optimised code for 60+ data reports using **Node Cron** jobs, demonstrating solid problem-solving skills.
- Developed scalable products using **Javascript** for automatic report generation, eliminating manual report creation by 100%.
- Deployed feature for report monitoring & logging using Express, slashing error debugging by 90%.
- Enhanced running time of more extensive duration reports by almost 98% by innovating an efficient and scalable method for saving and retrieving cumulative reports data (up to 1 year) in a compressed form onto **MongoDB** databases.
- Programmed code for 10+ Web APIs using Node.js and MongoDB syncing solutions for seamless report data integration.
- Leveraged **Redis** as a session data store for agents, resulting in a 90% reduction in real-time customer assignment latency, significantly improving system performance and operational efficiency.
- Collaborated in conducting 30+ **Javascript & data structures** focused technical interviews and played a crucial role in hiring 10+ software engineers, contributing to forming a skilled and qualified team.

#### TECHNICAL SKILLS

**Programming Languages:** Java, C++, Javascript, Python, Typescript

Web Technologies: Java Spring Boot, CSS, HTML, Node.js, React.js, Docker, Express, REST APIs

**Databases:** Hibernate, Relational Databases, MySQL, MongoDB, Postgres, NoSQL **Tools:** Version Control System, Git, CI/CD, Scrum, Linux, Jira, IntelliJ, VSCode

# **PROJECTS**

#### **Pinterest Clone Full-stack Web Application**

Feb 2024 – May 2024

- Developed a web application supporting over 100+ users, featuring user login/signup using OAuth, pin exploration, and uploading.
- Followed MVC architecture for application's backend systems using Node.js, React.js for responsive front-end and relational databases, increasing code reusability by 90%. [GitHub]

## **Virtual Stock Java Application**

Oct 2023 – Dec 2023

- Programmed a **Java**-based user interface and GUI application using **Java Swing** and the **MVC design pattern**, proficiently managing data for the top 470 company stocks of the S&P 500 share index and extensive **JUnit testing**.
- Devised logic and executed various application features in a **test-driven development**, including stock addition/sale functionalities on specified dates and performance analysis for data spanning up to 10 years. [GitHub]

# **Blog Springboot Web Application**

Aug 2023 – Aug 2023

- Developed a **Java Spring Boot** based web service facilitating 1000+ user profile creation, blog creation and management, reading of other users' blogs, and interaction functionalities like liking and commenting.
- Defined **SQL** tables/queries for storing 100+ user profiles, blogs, likes, and comments **databases**. [GitHub]