Devarshi Chatterjee

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EDUCATION:

MS in Computer Science,**New York University**, New York City   **09/2023-05/2025**
Relevant CourseWork: *Machine Learning, Software Engineering, Principle of Database Systems*
BTech in Computer Science Engineering, **KIIT University**, India   **07/2016-05/2020**

TECHNICAL SKILLS:

- Languages: Java, Python, C, C++, R, LLM Training and Fine-Tuning, Model Optimization
- Frameworks:Keras, TensorFlow, Kubernetes, Django, Flask, AWSCloud
- Databases: MySQL, MongoDB, Oracle, PostgreSQL

PROFESSIONAL EXPERIENCE:

Radical AI, New York City   **06/2024-08/2024**
AI Software Engineer Intern

- Created an MCQ generator that processes PDFs to produce questions, with LLM-based explanations for correct and incorrect answers, enhancing learning efficiency by 25%.
- Fine-tuned models to include new grade levels for questions, improving accuracy and relevance by 30%.

Infinera Corporation, Bangalore   **10/2022-07/2023**
Software Engineer 2

- Architected and deployed 17 high-performance RESTful APIs using Python and Flask, facilitating seamless integration with 5+ third-party systems and increasing overall system interoperability by 40%.
- Implemented Redis caching, slashing response times by 30% and accommodating 50% more concurrent users.
- Optimized SQL queries and redesigned database indexing strategies, resulting in a 25% reduction in query execution times and a 35% improvement in overall system throughput for critical reporting functionalities.

Tejas Networks, Bangalore   **07/2020-09/2022**
Software R&D Engineer

- Spearheaded development of robust backend services using Java and Spring Boot, ensuring 99.99% uptime for the Network Management System (NMS) overseeing 10,000+ network devices.
- Orchestrated integration with 3 major third-party monitoring tools, enhancing system visibility by 60% and reducing mean time to detection for critical issues by 45%.
- Architected PostgreSQL database sharding and replication strategies, facilitating horizontal scalability and achieving a 300% increase in data processing capacity.
- Revamped database architecture, including query optimization leading to a 40% decrease in execution times and supporting a 2x increase in concurrent users for high-priority reporting systems.

ACADEMIC PROJECTS:

GourmetGram(Machine Learning Project)   **04/2024-05/2024**

- Designed and fine-tuned multiple machine learning models (InceptionV3, MobileNetV2) using Keras, attaining 95% accuracy while decreasing inference time by 30% for image classification tasks.
- Orchestrated model deployment on a Kubernetes cluster using Chameleon cloud platform, resulting in a 50% reduction in deployment time and a 40% improvement in resource utilization.
- Implemented autoscaling, handling 200% traffic spikes while maintaining sub-100ms response times.

Roomie Rendezvous   **09/2023-12/2023**

- Architected a scalable room-sharing platform using PostgreSQL, Django, and Python, hosted on AWS Cloud, capable of handling 10,000+ concurrent users with 99.9% uptime.
- Created an intuitive map-based interface, boosting user engagement by 40% and increasing successful matches by 60%.

Delhi Guide   **05/2017-06/2017**

- Developed a feature-rich mobile application providing real-time navigation to 50+ famous tourist spots in Delhi, reducing average trip planning time by 60%.
- Devised automated real-time data retrieval from the Delhi Tourism website, ensuring 100% accuracy and eliminating 90% of manual updates.
- Launched the application on Google Play Store, achieving 50,000+ downloads and maintained a 4.5+ rating

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LEADERSHIP ROLES:

- Senator for NYU School of Engineering, representing it at the Student Government Assembly (SGA) and Student Senators Council (SSC).
- Served as Graduate Student Orientation Leader (Spring 2024), achieving 95% satisfaction rate among 200+ new students.