

KARTIKEY SHARMA

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EDUCATION

New York University

Master of Science (MS) in Computer Science, *GPA: 3.83 / 4.0*

Coursework: Design and Analysis of Algorithms, Big Data, Programming Languages, Software Engineering, Java

New York, NY

May 2025

Indian Institute of Technology - Goa

Bachelor of Technology (B.Tech)

Coursework: Linear Algebra and Calculus, Computer Architecture, Machine Learning, Randomized Algorithms

Goa, India

June 2023

TECHNICAL SKILLS

Programming Languages: C++, Java, Kotlin, Python, SQL, MATLAB, C#

Web Development: HTML, CSS, JavaScript, React.js, Vue.js, Flask, Heroku, MongoDB, Node.js

Android Development: Firebase, XML, Jetpack Compose, Google Maps, MVVM Architecture, Coroutines, Gradle, Dagger, Hilt

Frameworks and Tools: Postman, NumPy, Jira, Android Studio, Linux, JUnit, Apache Spark, Hadoop, .NET

WORK EXPERIENCE

Software Engineer Intern, SiriusXM, New York, NY

June 2024 - August 2024

- Engineered a smartwatch module for the SiriusXM Android app using **Java, Kotlin**, and Jetpack Compose, **collaborating with 5+ managers** and the product team, resulting in a **30% increase in projected user engagement**.
- Integrated Google Data APIs for seamless mobile and **Wear OS audio streaming** and designed an innovative "Now Playing" screen using Kotlin Coroutines and followed the MVVM architecture.
- Presented a tech talk to over **50 senior Android developers** and stakeholders, detailing project milestones and outcomes.

Full Stack Developer, MicroERP Systems, Delhi, India

May 2023 - August 2023

- Ideated and architected features for the **inventory management component of an ERP system**, collaborating in a team of 5 and participating in weekly SCRUMs and ideation sessions.
- Revamped the database architecture using **MS SQL Server** to integrate an inventory tracking workflow and **automated the population of over 50 inventory scenarios using Python**, reducing manual processing time by 70%.
- Implemented a data processing pipeline using **C#, .NET**, Entity Framework with LINQ, and stored procedures. Integrated this pipeline with an AngularJS application UI through APIs using best coding practices, resulting in 98% crash-free sessions.

Software Developer Intern, MathWorks, Bangalore, India

June 2022 – Nov 2022

- Achieved a **70% reduction in latency** by enhancing the Simulink Annotation Editor by **implementing multi-threading in JavaScript and C++** using object-oriented analysis and design.
- Deployed interactive workflows to **automate test generation**, increasing model coverage by 30% using MATLAB.
- Attained a 90% accuracy rate in **predicting MATLAB build test outcomes** by creating a decision tree model.

PROJECTS

Dining Eats (Python, HTML, AWS: S3, Lex, Lambda, DynamoDB, Elasticsearch)

- Designed and programmed a chatbot to provide restaurant recommendations based on user input.
- Ideated a serverless application using AWS services to manage restaurant data and handle notifications efficiently.
- Enhanced user experience and reduced response latency by 60%, enabling the chatbot to process over 10 parameters, index recommendations, and send notifications.

HTTP Proxy(C, C++)

- Developed an HTTP proxy in C to handle up to 100 concurrent requests, improving processing efficiency by 40% through effective process management combining mutexes, semaphores, and preemptive multithreading.
- Parsed and transmitted client requests to the target server, achieving a 95% accuracy rate in data transmission.
- Implemented comprehensive error-checking, reducing debugging time by 30% through clear and immediate error reporting.

Codeforces Visualizer (Android, Kotlin, Java, Coroutines)

- Architected, designed, and implemented an Android app to visualize user data, 10+ beneficial statistics, and scheduled contests on Codeforces. Utilized multithreading with MVVM architecture to ensure efficient and responsive UI
- Developed test strategies and automation frameworks, incorporating unit/functional tests to enhance code coverage to 93%, heading a team of 5 student developers, and shared biweekly progress reports with professors

Spark Your Imagination (Python, Apache Spark, MapReduce, Streamlit)

- Deployed user-based and collaborative recommendation systems leveraging Apache Spark and Streamlit
- Performed sentiment and genre cluster analysis using UDF on the Goodreads dataset, analyzing 229M records