Kajal Malik

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Graduated **With Honors** in **Computer Science and Engineering** in 2024

PROFESSIONAL EXPERIENCE

Microsoft | *Software Engineer 1* *(June 2024 – Aug 2025)*

- Automated deployment of Microsoft 365 services on **Sovereign Clouds** using **CI/CD** pipelines, leveraging region-aware artifact validation and dynamic test coverage to streamline workflows, and achieved **6x** faster deployment.
- Engineered **dependency-aware** orchestration to ensure correct service sequencing and reduced deployment failures.
- Integrated centralized dependency management and component-based buildouts using **REST APIs**, enabling **independent deployment** of loosely coupled packages and significantly improving scalability and flexibility.
- Enabled **real-time alerting** and monitoring for workflows to improve operational visibility and responsiveness.
- Built an internal **LLM-powered bot** for automated query resolution, reducing on-call workload by **50%**.
- Technologies: **C#, .NET, Node.js, REST APIs, Azure, Kusto Query Language, CI/CD pipelines**.

NoBroker Technologies | *Software Development Internship* *(May,2023 - June,2023)*

- Created an **Error Logging System** automating exception detection in company APIs, using **Spring Boot**
- Integrated **Elasticsearch** and **MongoDB** for robust exception storage and streamlined issue tracking on JIRA
- Enhanced **A/B testing** by implementing tag-based user segmentation, leading to better results and decisions
- Improved the UI of the project using **JQuery** script for better user experience, clarity and usability

Lex Res Data Analytics Pvt Ltd | *Software Development Intern* *(June,2022 - Aug,2022)*

- Utilized **Flutter** framework and **Android Studio** to construct the user interface for the company's mobile app
- Employed **Audio-Player** plugin to showcase audio files created from text summaries in an interactive manner.
- Collaborated with Database and Backend units to integrate UI with **AWS S3** storage for enhanced functionality

KEY PROJECTS

C Language Compiler | *Course Project* *(Spring 2023)*
Guide: Prof. Amitabh Sanyal

- Developed end-to-end C-like language **compiler**, with **scope** checking, **type** verification, and **overload** resolution
- Created **parser** and AST-based **error handling system**, facilitating debugging with informative error messages
- Employed **Sethi-Ullman** algorithm and advanced **control flow** techniques for efficient x86 machine code generation

Railway Reservation System | *Course Project* *(Spring 2023)*
Guide: Prof. S. Sudarshan

- Developed a **PERN stack** railway ticket booking system for efficient booking and an enhanced user experience.
- Engineered distinct user **privilege levels** and crafted an intuitive UI using **Tailwind CSS** and **Material UI**
- Implemented automated seat status updates using **functions and triggers**, enhancing overall system's efficiency

Peer to Peer Network Application | *Course Project* *(Spring 2022)*
Guide:Prof. Kameshwari Chebrulu

- Implemented a **P2P network** for searching and downloading files upto a specified neighbour depth
- Used basic **multi-threading** and implemented the **client-server** model for downloading files from peer
- Used **C++** to set up **TCP** connections for downloading files and used MD5 hash for detecting errors.

SCHOLASTIC ACHIEVEMENTS

- Secured a percentile of **99.65** in **JEE Mains** conducted by **NTA** amongst **1.2 million** across India *(2020)*
- Secured position in top **1.5%** in **JEE-Advanced** examination out of **0.2** million candidates *(2020)*
- Recieved **Super-100** scholarship by **Haryana Government** given to **100** students across the state *(2018)*

TECHNICAL SKILLS

- **Languages :** C/C++ | Python | VHDL| Prolog | Bash | Java | MATLAB |HTML | LaTeX| Django | JavaScript
- **Softwares :** Git | Android Studio | MATLAB | Photoshop | ArduinoIDE | Autocad | WireShark
- **Libraries and tools :** Pandas | Scipy | Numpy | Matplotlib | Scikit-learn | z3 | Tenserflow | Pytorch | OpenGL
- **Skills :** Web Devlopment | Flutter App devlopment | Computer Networks | Machine Learning

EXTRA CURRICULAR ACTIVITIES

- Successfully completed a year-long training of **NCC DRILL** and **YOGA** under **NCC** *(2020-2021)*
- Performed **Bhangra**, **Bollywood**, **hip-hop** and various dance forms at multiple shows at IIT Bombay *(2021-2024)*
- Pursued **Kathak** training for one year and completed a 3-month course in **flute** learning. *(2024-2025)*