

EXPERIENCE

- Limeroad

Gurugram

February 2025 - August 2025

Software Development Intern

  - Integrated Vmart storefront into the app’s navigation drawer by embedding a secure WebView and refactoring sidebar routing (**Kotlin—MVVM**); identified and cleared every critical defect in the release backlog.
  - Engineered modern UI components using **Jetpack Compose with Material3**, implementing interoperability between Compose and traditional View system while handling runtime permissions (Android13 APIs) and optimizing UI performance through proper **state management** and background task coordination.
  - Architected **unidirectional data flow** architecture (State -> Intent -> Action -> Effect/Event -> State) for advanced search functionality implementing clean architecture patterns, **achieving 95% search accuracy** with <50ms response times through optimized state management and performance optimization.
  - Designed modular Android architecture implementing clean architecture principles with **Hilt dependency injection**, creating **reusable feature** modules with proper component scoping.
- College Setu

Delhi

May 2024 - July 2024

Software Development Intern

  - Revamped the company’s website using ReactJS and Tailwind CSS and developed a Data Collection Portal with Flask, enhancing functionality and user experience.
  - Implemented comprehensive testing strategies and debugging workflows, **optimizing memory management** and troubleshooting performance bottlenecks while collaborating in agile development environment.

PROJECTS

- FurniAR

AR, Android Development, Firebase

08/2024 - 08/2024

Repository

  - Modular Architecture:** Implemented clean Android architecture using **Kotlin with MVVM pattern and Hilt DI framework**, dependency scoping across feature while achieving 30% performance through memory management optimization.
  - Enterprise Architecture:** Implemented **multi-module architecture** with dependency injection across feature modules, managing component lifecycles while reducing backend response times by 20% through optimized state management and unidirectional data flow patterns.
- Optimized Neural Network-Based Routing Protocol for VANETs

VANET, Machine Learning

08/2024 - 11/2024

Repository

  - Optimization:** Developed a hybrid routing protocol for VANETs integrating Neural Networks and Reinforcement Learning, achieving a 20% reduction in latency and a 15% improvement in routing efficiency.
  - Adaptability:** Designed and implemented a neural network-driven decision-making system to optimize routing in dynamic vehicular networks, demonstrating scalability and adaptability through real-time simulations.

SKILLS

- Android Architecture:** Kotlin, Java, Android SDK, MVVM, Clean Architecture, Modular Design, Dependency Injection (Hilt)
- Mobile Technologies :** Jetpack Compose, Material Design, Performance Optimization, Memory Management, UI/UX Design
- Development Tools:** Git, JIRA, Android Studio, IntelliJ, GitHub, Performance Profiling, Testing Frameworks

EDUCATION

- Netaji Subhas University of Technology

Delhi

2025

Bachelor of Technology in Mathematics and Computing

  - Relevant Coursework: Data Structures, Design and Analysis of Algorithms, Machine Learning, Software Engineering, Soft Computing, Computer Networks, Operating Systems, Scientific Computing, Theory of Automata, Optimization, Mathematical Statistics, Database Management System, Computer Architecture, Big Data Analytics

ACHIEVEMENTS

- Authored a **23-page research paper** on improving Grover’s algorithm for quantum search optimization, leveraging IBM’s Quantum Experience toolset for simulation and testing. Delivered 3+ on-campus presentations to faculty.
- Co-authored a **13-page journal article** on a hybrid VANET routing protocol using ANN and Reinforcement Learning, achieving improved PDR, latency, and throughput through multimetric optimization and simulations.