VAIBHAV KUMAWAT

+91-7851981514| vaibhavkumawat1003@gmail.com | LinkedIn | GitHub | Portfolio

Skills

Languages and DataBases: Java, SQL Web Technologies: HTML, CSS, JavaScript

Mobile Development: Android Studio, Kotlin, XML

Experience

SmartBridge Educational Services Pvt. Ltd

Sep 2023 - Nov 2023

Android App Development Intern

Remote

- Developed a snack delivery mobile application using Kotlin & XML layouts.
- **Implemented** Firebase Realtime Database for secure and efficient real-time order management and user data synchronization, **reducing order processing time by 10%**.
- Collaborated effectively with a remote team using agile methodologies to debug and optimize app performance, decreasing average load time by 15% and improving user engagement metrics.

Projects

ChatMate Ai | HTML, CSS, Javascript, Gemini API | GitHub

Jan 2025 – Feb 2025

- **Engineered** an Al-powered chatbot designed to facilitate real-time and engaging communication with users, utilizing Google's advanced Gemini API for sophisticated natural language processing and understanding.
- **Implemented** an intuitive and responsive web interface using HTML, CSS, and JavaScript, ensuring seamless and consistent interaction across various devices and platforms.

DOA Estimation with Quaternion GGDs Distribution

Jan 2025 - Apr 2025

- Developed Minimum Variance Unbiased Estimators (MVUEs) for Direction of Arrival (DOA) estimation using H-proper quaternion-valued Generalized Gaussian Distributions (GGDs).
- Compared MVUE and Maximum Likelihood Estimation (MLE) performance, evaluating accuracy and Root Mean Square Error (RMSE).
- Demonstrated estimator's robustness to larger magnitudes, suggesting it can handle noisy or uncertain data.

WhatsApp Bot | Node.js, JavaScript, Baileys Library, Gemini API | Github

Nov 2024 - Jan 2025

- Developed an advanced **WhatsApp automation bot** leveraging **Baileys Library** for seamless interaction with WhatsApp Web API.
- Integrated Google's Gemini API to provide an AI-powered chatbot for intelligent user interactions.
- Enhanced bot security and optimized codebase for **lightweight deployment**, reducing server resource usage by **90%** and improving overall **performance and latency by 60%+** based on user feedback.
- Achieved 10K+ forks and 4K+ stars on GitHub, showcasing wide adoption and community trust.

Education

Vellore Institute of Technology, Chennai

2021 - 2025

Bachelor of Technology in Electronics & Computer Engineering

CGPA: 8.39/10

MATRIX SR SEC SCH, SIKAR

2020 - 2021

 12^{th} (PCM + CS)

Percentage: 96.8

Certifications

Android Application Development

Publications

Vaibhav Kumawat, et al., "Minimum Variance Unbiased Estimators of Generalized Gaussian Distribution With an H-Proper Quaternion Random Variable," <u>IEEE</u>, April, 2025.