Samarth Varshney

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Samarth0802

Education

Zakir Hussain College of Engineering and Technology, AMU, Aligarh *March 2022 – April 2026*
Bachelor of Technology (B.Tech.) in Electronics Engineering

- CGPA: 9.419/10.0

St. John's School, Firozabad *March 2021 – March 2022*
Senior Secondary (Class 12) – PCM (Physics, Chemistry, Mathematics)

- Percentage: 95.2

Experience

Full Stack Web-Development Intern *Remote*
Coderone *Dec 2024 – Jan 2025*

- Developed and deployed two full-stack web applications, implementing both front-end and back-end functionalities.
- Worked with modern web technologies, including JavaScript, React, Node.js, and MongoDB, to build scalable solutions.
- Collaborated with a team to optimize application performance and enhance user experience.
- Gained hands-on experience in API integration, database management, and responsive UI design.

Analog Design and Circuits Internship *Aligarh*
AMU *June 2024 – Dec 2024*

- Gained hands-on experience in designing and analyzing analog circuits.
- Worked on circuit simulations and performance optimizations using LTSpice.

Projects

WanderLust Clone of Airbnb *github.com/Wanderlust*

- WanderLust is a full-stack web platform for browsing, booking, and listing vacation accommodations like houses, villas, and farmhouses. It features a seamless booking system, real-time property views via Mapbox API, and secure logins with Google and GitHub OAuth. The platform ensures responsive performance with a dynamic server and an intuitive, user-friendly interface.
- Tools Used: HTML,CSS,JavaScript,MongoDB,Node.js,Express.js

Feedback-Collector-System *github.com/feedback*

- The Feedback Collection System is a web-based platform for gathering, managing, and analyzing user feedback. It features customizable forms, real-time submissions, secure authentication, and multi-channel accessibility. Administrators benefit from analytics tools, feedback tracking, and integration capabilities. The system ensures data security with encryption and audits while supporting responsive design, automated notifications, and export options for seamless management.
- Tools Used: Vs-Code,MongoDB,HTML,CSS,JavaScript

5G-IOT Drip Irrigation Remote Control System (Ongoing) *2025*

- This project develops a smart drip irrigation system using 5G-IoT technology for efficient water management in agriculture. It enables real-time remote monitoring and control via mobile and web interfaces, ensuring optimal soil moisture levels. Sensors detect soil moisture and temperature, automatically triggering irrigation based on predefined thresholds, while users can remotely approve or override cycles. With low-latency, high-speed 5G connectivity, the system is ideal for large-scale farming, and data analytics with historical logs help optimize water usage, improving crop yield while conserving resources.
- Tools Used: Embedded C/C++, 5G IoT Communication, MQTT Protocol, React.js, Node.js, Firebase,

WebSockets, REST APIs.

Spotify Web Player *2024*

- Developed a Spotify-inspired web music player with an interactive and responsive UI.Designed a modern and visually appealing interface using CSS animations and flexbox/grid layouts.
- Tools Used: HTML,CSS

Simon Says Game *2024*

- An interactive Simon Says memory game was designed to assess users' ability to recall and replicate sequences. The game incorporates dynamic color changes to enhance user engagement and provide visual feedback. Utilizing JavaScript, the implementation includes game logic, random sequence generation, and user input validation, ensuring a seamless and interactive experience.
- Tools Used: HTML,CSS,JavaScript

Technologies

Languages: Python, C++, JavaScript, HTML, CSS, React

Technologies: Node.js,Socket.io,SQL, Git, GitHub, Arduino, LTSpice, Cadence

Publications

Published my report on Scribd regarding the topic "How True Are Media Representations." (Read More)
Samarth Varshney, ***Umar Khalid***

Design of Bandgap Reference (Ongoing) – Working on a low-power BGR circuit with improved temperature stability.
Samarth Varshney, ***Ahmad Ilyas***, ***Tabish Ahmad***

Workshops

- Two-day Workshop on Analog Circuit Design conducted by Dr. G.S. Javed (Intel, Bengaluru).
- Three-day Workshop on Embedded Systems conducted by Funambolo Co.