MUGHILAN PAUL

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https://www.linkedin.com/in/mughil128/ | https://github.com/Mughil128/

TECHNICAL SKILLS

Language & Tools – Python, MySQL, HTML, CSS, JavaScript
Soft Skills – Problem-solving, critical thinking, collaboration & teamwork, project management, communication
Languages – English, Tamil

PROJECTS

➤ **Digital Twin Simulation for 5G Tower Placement | Python, Mapbox GL**   Feb 2025 – Mar 2025

• Used Mapbox GL API to create an interactive geospatial interface for tower placement.
• Implemented geospatial filters to eliminate towers placed on water bodies, improving placement accuracy.

➤ **Personalized Study Planner | Python, Flask, HTML/CSS**   Feb 2025 – Mar 2025

• Developed an intelligent chatbot capable of answering user queries based on uploaded academic documents using FAISS to retrieve relevant content and Gemini AI to generate answers.
• Built the backend with Flask, handling document upload, query input, and dynamic response delivery.

➤ **OD Processing System | Python, MongoDB**   Jan 2025 – Apr 2025

• Developed a centralized On-Duty management system for students and faculty.
• Enabled request tracking, approval workflows, and audit history logging using MongoDB schemas and Mongoose models.

➤ **3D Interview Simulator | Unity, Meta Quest, Wit.AI**   Jan 2025 – Apr 2025

• Contributed to the development of a VR interview environment using Unity and OpenXR for Meta Quest.
• Implemented interaction logic for user selection, avatar handshakes, and menu navigation within Unity's visual scripting system.
• Collaborated with backend and AI team integrating Gemini API and Wit.ai for question generation and feedback

EDUCATION

SSN College of Engineering – 2023 - 2027
B.Tech in Information Technology
CGPA: 8.477

Mahindra World School – 2023
12th Grade – 93%

Certifications

- C2 in Advanced Technical English (Cambridge)
- Ethical Hacking (NPTEL)
- Privacy and Security in Online Social Media (NPTEL)

EXTRACURRICULARS

• SIH '24 Finalist
• Core Member, College Humor Club – Content & Event Planning
• Core Member, College English Literary Club – Content Creation
• Editor, Department Newsletter
• Volunteer, NSS and Scouts & Guides
• Completed Grade 5 in Electronic Keyboard and Grade 3 in Music Theory from Trinity College of London

INTERESTS

Pencil sketching, digital art, reading sci-fi and mysteries, writing fiction and blogs