ATHARVA SHUKLA

Navi Mumbai, India | +91 8369707468 | shuklaatharva813@gmail.com
LinkedIn | GitHub | Portfolio

PROFESSIONAL SUMMARY

Enthusiastic and self-motivated B.Tech Computer Science (AI/ML) student at VIT Chennai with a strong foundation in machine learning, deep learning, and full-stack development. Experienced in building AI-powered applications, optimizing models for research and real-world performance, and contributing to academic projects involving explainable AI and quantum computing. Skilled in applying modern development practices and actively seeking opportunities to contribute to cutting-edge tech environments.

EDUCATION

Vellore Institute of Technology (VIT), Chennai
B.Tech in Computer Science and Engineering (AI/ML)
Aug 2023 – July 2027 (Expected)
CGPA: 8.47/10

DAV Public School, Navi Mumbai
CBSE – Senior Secondary
Jun 2021 – May 2023
Percentage: 90.2%

TECHNICAL SKILLS

Languages: Python, C++, Java, JavaScript, SQL
Frameworks & Libraries: PyTorch, TensorFlow, scikit-learn, Hugging Face, OpenCV, Keras
Tools & Technologies: Git, GitHub, Google Colab, Jupyter, Firebase, FFmpeg
Web Development: HTML, CSS, JavaScript, React.js, Node.js, Express.js
Database Systems: MongoDB, MySQL
Cloud & DevOps: AWS EC2/S3, Azure, Git Workflow, CI/CD (Beginner)
Others: Transformers, LoRA/QLoRA (ongoing), Socket.io, REST APIs

---

PROJECT EXPERIENCE

Portfolio Website *Jan 2025 – Apr 2025*

- Developed and deployed a personal portfolio with dynamic theme toggling and contact form integration.
- Tools: HTML, CSS, JavaScript
- GitHub: github.com/atharvashukla13/portfolio

Multi-Cancer Detection Using Explainable Quantum Neural Networks *Feb 2025 – Present*

- Designing a QNN pipeline with Explainable AI features for image-based cancer classification.
- Tools: Qiskit, TensorFlow Quantum, Google Colab

Autonomous Polymetallic Nodule Detection *Dec 2024 – Present*

- Applied image enhancement and YOLOv8 detection for marine robotics vision systems.
- Improved accuracy under low-light and murky conditions.

Video Streaming Platform (MP4 to HLS Conversion) *Aug 2024 – Nov 2024*

- Built a Node.js pipeline using FFmpeg and Video.js to stream segmented HLS videos.
- Enabled adaptive streaming with real-time load handling.

Software Developer – Full Stack Intern (VIT Chennai) *Jul 2024 – Dec 2024*

- Built full-stack web apps with dashboards, chat features, and backend API optimization.
- Stack: React.js, Node.js, Express.js, MongoDB, Socket.io

RESEARCH EXPERIENCE

Quantum Neural Networks for Medical Diagnosis
VIT Research Initiative – Feb 2025 to Present

- Integrated explainability with QNN architectures for real-time cancer classification.
- Focused on edge compatibility, interpretability, and future publication.

INTERNSHIP EXPERIENCE

VIT Connect – Content & Outreach Intern *Oct 2024 – Feb 2025*

- Produced student testimonial campaigns and structured VIT's outreach content.
- Improved engagement and visibility across campus platforms.

STRENGTHS

- Strong in applied AI/ML and GenAI modeling
- Practical exposure to Hugging Face, model tuning, and cloud workflows
- Fast learner with a research-driven mindset
- Experienced in both individual and collaborative project environments