Utkarsh

utkarsh110549@gmail.com | linkedin.com/in/utkarsh-void | github.com/voidutk

Education

KIIT University Bhubaneswar, Odisha, India
B.Tech in Computer Science & Engineering (AI & ML) — CGPA: 9.03 *Aug. 2024 – May 2028*

Experience

Keystone, KIIT University Bhubaneswar, Odisha, India
Intern *2026 – Present*

- Working with the KIIT KARES team, contributing research and planning support for upcoming initiatives

Research & Publications

IEEE Published Paper — Oral Cancer Detection Nov. 2025
Semi-Supervised Oral Cancer Image Classification Using GAN-based Augmentation and EfficientNet-B3 *IEEE Xplore*

- Published at the 2025 3rd DMIHER Int'l Conference on AI in Healthcare (IDICAIHEI) [DOI]
- Proposed a semi-supervised pipeline combining EfficientNet-B3 with a K+1 SSGAN for binary oral cancer classification under low-annotation settings
- Achieved 93.5% accuracy and AUC 0.95; ProtoNet few-shot evaluation reached 94% accuracy on 5-way 10-shot tasks
- Preprocessed the Kaggle Oral Cancer dataset using Python, Pandas, and NumPy; applied GAN-based augmentation to improve model robustness

Projects

ARGUS — AI-Powered Criminal Network Analysis Platform GitHub 2026
React, Node.js, Express, PostgreSQL, Neo4j, FastAPI, Solidity

- Built a 4-service investigation platform for Smart India Hackathon 2026 (SIH26189, Ministry of Home Affairs) reframing cybercrime investigation from isolated complaints to networked criminal organizations
- Engineered a two-tier NLP pipeline (regex + spaCy NER) feeding a Neo4j graph running Louvain clustering and PageRank/betweenness centrality to algorithmically surface network coordinators with zero direct victim contact
- Designed a blockchain-backed evidence custody system (Solidity, Hardhat, OpenZeppelin) with an append-only, court-auditable verification history (17-case test suite) and a role-gated React/Cytoscape.js UI enforcing four-tier RBAC end-to-end

KUSH — Supply Chain Resilience Engine GitHub 2025
Python, Streamlit, scikit-learn, Gemini API

- Built an AI-powered supply chain risk assessment dashboard predicting supplier risk via a two-stage ML pipeline (classification + regression) with graceful degradation on missing data
- Integrated Google Gemini API for contextual risk insights and live currency conversion for cross-border supplier analysis
- Wrote a comprehensive test suite to validate model outputs and edge cases

Asclepius — AI Business Operating System GitHub 2026
Python, FastAPI, React, Tailwind, PostgreSQL, Docker

- Built a modular AI platform automating SME workflows (inventory/sales intelligence, HR resume screening & onboarding) via an agent pipeline (ingest → analyze → recommend) requiring human approval before any action executes
- Architected a shared cross-module system (agents, approvals, audit log) so new modules (finance, operations) plug in without rework of core infrastructure
- Shipped a full-stack, deployed product end-to-end in a live hackathon under time pressure, placing top 30 of 285 teams

Achievements & Extracurricular

Certificate of Appreciation — International Astronomical Search Collaboration (IASC) Aug. – Sep. 2026
NASA-partnered citizen science program, in collaboration with Pan-STARRS (Institute for Astronomy, University of Hawaii)

- Recognized for contributions to observations of near-Earth objects and Main Belt asteroids through analysis of Pan-STARRS images

Bronze Award — INDCON Industrial Innovation Challenge Mar. 2026
National Level Techno-Management Symposium, CEG, Anna University (IIE Chennai Chapter)

- Won Bronze in the Industrial Innovation Challenge at INDCON 26, a national-level symposium organized by the Dept. of Industrial Engineering, CEG, Anna University
- Built and presented KUSH, an AI-based supply chain disruption prediction system; handled implementation, pitching, and live demo during the competition

Technical Skills

Languages:	Python, JavaScript, Solidity, C, Java, SQL
AI/ML:	scikit-learn, TensorFlow, EfficientNet, GANs, spaCy, NLP, MediaPipe, OpenCV
Web & Backend:	React, Node.js, Express, FastAPI, Three.js, Tailwind CSS
Databases & Graph:	PostgreSQL, Neo4j (Cypher)
Blockchain:	Solidity, Hardhat, Ethers.js, OpenZeppelin
Tools & Cloud:	Git, Docker, Jupyter Notebook, Google Gemini API, Google Cloud Platform