Dharaneesh Dhupam

+91 8919315254 | dharaneeshdhupam@gmail.com | LinkedIn | GitHub | Personal Site

Education

Indian Institute of Information Technology, Kurnool | CGPA: 7.19 / 10 — 2020 – 2024
Bachelor of Technology (B.Tech) in Electronics & Communication Engineering with a Minor in Machine Learning & Data Science

Dr. B.R. Ambedkar Open University | Hyderabad, India | CGPA: 7.45 / 10 (First Division) — 2022 – 2025
Bachelor of Arts in Economics, Sociology & Public Administration

Research Experience

Founder & CEO — Oct 2023 – Present
Systems Change, Inc. (Incorporated Sept 2025, Delaware) | *sysc.land* — *Remote*

- Founded and led development of a decentralized property transaction platform enabling users to find, buy, sell, and manage land records securely online.
- Designed and implemented cryptographically verifiable records using **Post-Quantum Digital Signatures (ML-DSA)** for immutable, tamper-proof storage.
- Built interactive geospatial mapping and property visualization features with remote sensing capabilities.
- Architected backend infrastructure with **Django, Kubernetes, and GCP**, ensuring scalability and fault tolerance; moved to a decentralized design using **IPFS** storage.
- Leading go-to-market and government integration strategy for next-generation property administration systems.
- *Tech Stack: Python, Django, JavaScript, HTMX, PostgreSQL, FrankenUI, Kubernetes, GCP*

Research Intern — Dec 2023 – Apr 2024
IIIT Kurnool, Dept. of Computer Science — *Kurnool, India*

- Developed a robust AI system for detecting and classifying wheat crop diseases using deep learning techniques.
- Implemented and fine-tuned models like **VGG19** and **ResNet50**, achieving 96% accuracy in image-based disease identification to aid farmers in reducing yield losses.

Selected Projects

AI-Assisted Blog Platform (seaofus.com) | *Django, HTMX, Llama 3.1, Flux, Docker* — Sep 2024 – Apr 2025

- Designed and developed a full-stack social publishing platform to democratize content creation, offering both public publishing tools and a private writing environment with an AI companion.
- Integrated **gpt-oss-120b** LLM for automated text generation and **Flux** for on-demand image creation via APIs.
- Implemented a clean writing experience using Quill WYSIWYG (What You See Is What You Get) editor and **HTMX** for dynamic, server-side interactions without page reloads; doubles as a private writing space.

Land Records Data Automation | *Python, Pandas, Selenium*

- Automated a manual government land-survey data entry process for a village administration office, reducing a 3–4 week task to 4 days (**6× speedup**) through 2 days of programming and 2 days of implementation.
- Cleaned and normalized messy dataset using Pandas by detecting name patterns and inconsistencies.
- Developed a hybrid Selenium script to populate forms and handle edge cases/buggy interactions in a legacy web portal, significantly streamlining a bureaucratic workflow.

Preprints / Working Papers

Dhupam, D. (2025, July 26). *PQC-VE: A Post-Quantum Framework for End-to-End Verifiable Electronic Voting.* TechRxiv. 10.36227/techrxiv.175234511.12096363/v2

Dhupam, D. (2025, Nov 26). *HyARC: A Hybrid Algorithm for Secure Storage of High-Value Secrets.* TechRxiv. 10.36227/techrxiv.176420154.45562220/v1

Dhupam, D. (2025, July 9). *The Theory Of Replaceability: An Evolutionary Mechanism Influencing Differential Variability.* 10.31219/osf.io/9rmf5_v2

Thesis

Dhupam, D. (2024, May). *Post Quantum Cryptography based Land Records Management System* (Undergraduate Thesis, IIITDM Kurnool). 10.31237/osf.io/nhwks_v1

Languages & Skills

Languages: Python, JavaScript, SQL, C, HTML, CSS, Bash
Frameworks/Tools: Django, HTMX, Docker, Tailwind CSS, Kubernetes, Git, Nginx, Gunicorn, Pandas, PyTorch, TensorFlow
Cloud/Infra: GCP, AWS, Linux (Debian)

Certifications

Harvard University: CS50's Introduction to Artificial Intelligence with Python
Yale University: Narrative Economics

Awards

Winner, Project Expo 2023: Built a GSM-based GPS tracking device using Arduino (IIITDM Kurnool Open Day).