KRISHANG TALSANIA

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EDUCATION

Pandit Deendayal Energy University

Gandhinagar, Gujarat

Electronics and Communication Engineering - CGPA: 8.4/10.0

Expected 2028

• Relevant Coursework: C Programming, Python, Calculus, Linear Algebra, CAD

EXPERIENCE

Software Development Intern

May 2025 - Present

Robotics Lab - IIT Gandhinagar

- Work on Phase 2 development of a half-humanoid robot, focusing on system integration and robotics software.
- Collaborate with a multidisciplinary team on motion planning, hardware—software interfacing, safety systems, and the vision intelligence stack.

Technical Content Intern

March 2025 - May 2025

My Equation

- Authored high-accuracy technical documentation aligned with Industry 4.0 principles, covering **embedded systems** and **internet-of-things** to support next-gen engineering solutions.
- Collaborated with industry experts and technical mentors to **refine system-level documentation**, gaining insights into real-world engineering practices and standards.

PROJECTS

MedLabAI May 2025

Blood test analysis system

- Developed an offline app in **Python** using a **Random Forest classifier** to predict diabetes, anemia, kidney disease, and infections from blood test parameters, featuring an interactive UI with real-time alerts and probability visualizations.
- Implemented end-to-end data preprocessing and model training pipeline with **pandas**, **numpy**, **scikit-learn** and frontend with **Streamlit** for seamless local execution.

Local Semantic Search April 2025

Python based AI search engine

- Engineered a privacy-focused semantic search engine in **Python** using **Streamlit** for frontend, **Sentence Transformers** for NLP embeddings, and **ChromaDB** for vector database.
- Implemented **meaning-based search** capabilities for **PDF** files that understand search intent beyond keyword matching.

Custom ROM Development

April 2024

AOSP-based OS Compilation

- Successfully compiled and deployed custom Android firmware (PixelExperience) for Xiaomi Redmi Note 11 (spes), demonstrating proficiency with Linux build environments and Android platform development.
- Optimized build process using **ccache configuration** and managed complex source code dependencies to generate **custom recovery** and **system installation packages**.

TECHNICAL SKILLS

Languages: C, Python, Java, Bash Scripting, MATLAB, LaTeX

Technologies: RedHat Linux, Git and Github, Operating Systems, Mobile Development, Arduino, ESP32

Editorial Team - SOT, PDEU

Content Editor

February 2025 - Present

- Serve as Content Editor for the annual department magazine (Sancharini 2025) and newsletters under Prof. Abhishek Kumar's guidance.
- Collaborate with the student editorial team to curate, edit, and refine articles for publication.

IEEE Student Branch – PDEU

September 2024 - Present

Computer Society & Signal Processing Society

- **Technical Team** Design and **organize interactive workshops**, delivering hands-on technical sessions to enhance participant skills.
- Content Team Coordinate event communications by creating pre-event promotions and post-event recaps, capturing on-site photography, and managing participant experience.
- Event Management Represented the PDEU Student Branch at Sampark 2025, engaging with industry professionals and showcasing branch initiatives.

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