#### Archeet Shah

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## **EDUCATION**

# Purdue University – West Lafayette, IN, United States

**Expected May 2028** 

Bachelor of Science in Computer Engineering

### **SKILLS AND PROFICIENCIES**

Programming: Python, Java, C, JavaScript, HTML/CSS

AI & Frameworks: OpenAI API, LangChain, Scikit-Learn, OpenCV, JAX, FastAPI

Tools & Infra: Git, VSCode, Pinecone, MuJoCo, Siemens NX, Zoho API

## WORK EXPERIENCE

Sharp i-Tech, Mumbai India – Software Engineering Intern

May 2025 – August 2025

- Designed and deployed an AI-driven document analysis pipeline using OpenAI GPT-4.1 with OCR and FastAPI, automating extraction and classification of data from Bills of Lading, Commercial Invoices, and freight PDFs.
- Integrated the processed outputs directly into the company's dashboard through API synchronization and validation logic, cutting manual data-entry time by 85% and improving accuracy of logistics records.

Hindustan Electric Motors, Mumbai India - Engineering Intern

May 2023 – June 2023

- Conducted data-driven analysis of induction motor components using thermal efficiency metrics to optimize performance and reduce energy loss
- Developed iterative optimization models for rotor design, improving power output by 2% and reducing thermal losses by 3.5% through simulation-backed design decisions

#### **PROJECTS**

**Zoho People Virtual Assistant** – Lead Developer

**May 2025 – September 2025** 

(Python, OpenAI API, Zoho API, FastAPI)

- Built and deployed a GPT-based HR assistant at Sarjak Container Lines, handling 600+ Zoho People queries/month (leave, salary, policies) for 200+ employees via natural language
- Integrated OpenAI with secure Zoho API endpoints and fallback logic, reducing per-query time by ~2 minutes and improving internal HR self-service efficiency

**Nova-CUA** - Backend + Control Pipeline Developer

September 2025 – Present

(Python, Gemini 2.5, InterVL-4B, Torch)

- Developed GUI grounding agent using InterVL-4B to execute pixel-precise desktop actions (click, type, drag) from natural language prompts in a multi-agent system
- Integrated with planner and coder agents (Gemini 2.5) via composed control pipeline, enabling fully autonomous multistep workflows like "Open Firefox and search weather in NY"
- Youtube: https://www.youtube.com/watch?v=Q0IDtuI2iXQ

**TaskFlow AI** – Lead Developer

July 2025 – Present

(LangChain, FastAPI, OpenAI API, Google API, Python)

- Built a DAG-based automation platform that executes prompt-driven workflows across Gmail, Google Calendar, and Sheets, saving ~10 hours/week across 35+ academic/productivity tasks
- Implemented LangChain agent orchestration with modular APIs, error recovery, and task routing logic for scalable multi-step automation

#### **PUBLICATIONS**

Design And Development of An Autonomous Agricultural Rover For Planting And Irrigation Systems Using TRIZ **Design Principles (IJSHRE)** – First Author

• Utilized an Arduino Uno, solar panels & SOLIDWORKS to construct a self-powered rover for automated farm

- seeding, along with a proprietary seed ejection mechanism
- Corrected for sensor bias (soil distortions) to ensure fair & consistent navigation decisions

## **CLUBS**

**Humanoid Robotics Purdue** – Software Team Member

January 2025 - Present

Trained RL locomotion models for bipedal agents using MuJoCo and JAX

Autonomous Motorsports Purdue – Software Team Member

January 2025 - Present

• Contributed to real-time CV pipeline (OpenCV) for autonomous go-kart navigation