

# Impana Anand

AI Engineer specializing in enterprise AI automation and agentic platforms. Passionate about leveraging AI to enhance enterprise productivity and employee experience.

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## PROFESSIONAL EXPERIENCE

### AI Engineer

Jul 2025

Veunex Private Limited

- Developed **AI models** to detect **hazardous activities** in onshore and offshore rigs, enhancing workplace safety.
- Configured automated **alarm systems** to trigger alerts upon detecting activity breaches.
- Implemented continuous **real-time monitoring** of rig operations using **Kibana, Flink, and Kowl** platforms for anomaly detection and analytics.

### AI & ML Engineer

Jul 2024 – Jun 2025 | Bangalore

F9 Cybrisk Tech Pvt Ltd

- Developed a **deep learning model** to detect **fake videos and audio** with high accuracy.
- Built and optimized a **machine learning system** for **phishing website and email detection**, improving cybersecurity threat identification.
- Applied **data preprocessing, model tuning, and evaluation techniques** to enhance system performance and reliability.

### AI&ML Developer

Apr 2024 – Jun 2024 | Bangalore, India

Geekonomy (Intern)

- Built **interactive dashboards** using **Tableau** and **Power BI** for criminal database analysis.
- Analyzed crime patterns and trends** to generate actionable insights and support data-driven decision-making.
- Optimized data visualization workflows for improved clarity and analytical efficiency.

### Software & AI Developer

Feb 2023 – May 2023 | Bangalore, India

nCorium (Intern)

- Developed **face recognition** and **license plate recognition** systems using **machine learning** and **deep learning** techniques.
- Optimized models** to achieve **high accuracy** and **low latency** for real-time video applications.
- Integrated detection pipelines into production environments to ensure robust performance.

### Researcher

Oct 2022 – Jan 2023 | Prayagraj, India

IIT -Allahabad (Internship)

- Developed **methodologies for remote sensing data acquisition and processing** tailored for **urban environments**.
- Gained proficiency in **remote sensing and GIS software tools** for geospatial data analysis and visualization.
- Contributed to improving **data accuracy and efficiency** in urban mapping workflows.

## EDUCATION

BE in Artificial Intelligence and Data Science - 9.10 CGPA

2020 – 2024 | Bangalore, India

Global Academy of Technology

## PROJECTS

### RAG Agentic System for Federal Register Executive Orders

- Developed a **Retrieval-Augmented Generation (RAG)** system to fetch and analyze U.S. executive orders.
- Designed a backend using **FastAPI** and **MySQL** for document storage and retrieval.
- Built an interactive **Streamlit** interface for querying and summarizing content using **Qwen2.5 LLM**.
- Implemented efficient **embedding-based retrieval** to improve response accuracy and context understanding.

## HR Chatbot

- Built an **AI-powered HR chatbot** using **FastAPI** and **Streamlit** to answer employee queries.
- Integrated a **RAG pipeline** leveraging **FAISS** for vector search and **Sentence Transformers** for embedding generation.
- Utilized the **Mistral** model to deliver accurate, context-aware responses about employee skills and projects.
- Enhanced employee support automation and reduced manual HR intervention.

## Enhancing MRI Synthesis

- Developed a deep learning pipeline for **Knee MRI image synthesis and 3D reconstruction**.
- Applied **GAN-based architectures** to improve image realism and quality.
- Focused on enhancing diagnostic accuracy and visualization in medical imaging workflows.

## Accident Detection Using Deep Learning

- Designed an **accident detection system** using **CNNs and LSTMs** for video analysis.
- Incorporated **Explainable AI (XAI)** techniques to interpret and visualize model decisions.
- Achieved high accuracy and low latency suitable for real-time surveillance systems.

## Drug Classification Using ML Algorithms

- Built and compared multiple **machine learning models** for drug classification.
- Applied **ensemble learning techniques** to enhance predictive performance and reliability.
- Optimized data preprocessing and feature selection for improved accuracy and efficiency.

## SKILLS

**Programming Languages:** Python, C, JavaScript, HTML, CSS

**AI & ML:** Machine Learning, Deep Learning, Generative AI, NLP, RAG | TensorFlow, PyTorch, React.js


**Databases:** MySQL, MongoDB, PostgreSQL

**Tools & Platforms:** Jupyter Notebook, VSCode, GitHub, Docker, Grafana, Prometheus

**Business Intelligence:** Tableau, Power BI, Microsoft 365

**Learning:** ServiceNow, Microsoft Copilot, Azure OpenAI, ITSM Workflows, Data Governance

## PUBLICATIONS

**Accident Detection using Images and Videos with CNN, LSTM, and Interpreting the Results using LIME & GradCAM**   
*IEEE*

**Drug Classification Analysis Using Different Machine Learning Algorithms**   
*IEEE*

**Prediction of Schizophrenia in Patients Using Fuzzy AHP and TOPSIS Methods**   
*Springer*

**Analysis of Hospital Patient Data Using Computational Models**   
*Springer*

## CERTIFICATIONS

**Introduction to Industry 4.0 and IoT (72%)**  
IIIT Hyderabad - NPTEL

**NLP Foundation Certification**  
Infosys Springboard

**Privacy and Security in Online Social Media (61%)**  
IIIT Hyderabad - NPTEL