APEXA RAMI

Address: Merkurstr 14, 93051, Regensburg
Phone: +49 15566365944
Email: apexajrami@gmail.com | https://github.com/Apexarami
Website: https://www.linkedin.com/in/apexa-rami

SUMMARY

I'm a software developer with a strong foundation in Python, backend development, and cloud technologies. Over time, I've developed a deep interest in machine learning and MLOps, and I'm actively building skills in that direction. With hands-on experience in building REST APIs, automating data workflows, and deploying scalable systems using AWS and CI/CD pipelines, I'm now exploring how to apply these skills to intelligent, real-world AI solutions. I'm passionate about learning and excited to grow into a developer who builds systems that learn and adapt.

WORK EXPERIENCE

Software Developer, Syndell technologies **November 2022 - November 2023**

- Built and optimized Python apps with FastAPI/Django/Flask and MySQL/PostgreSQL.
- Automated data workflows using Pandas and NumPy.
- Deployed cloud-based solutions (AWS/GCP) with CI/CD integration.
- Created web applications and e-commerce sites using PHP and MySQL.
- Wrote unit tests (PyTest) and collaborated in Agile teams.

Intern Web-designer & SEO expert, IT-HUB Software development **Mar 2021 - Dec 2021**

- Designed responsive websites, prioritizing UX.
- Implemented SEO strategies, boosting traffic.
- Conducted keyword research and content optimization.
- Used Google Analytics for performance tracking.
- Collaborated with clients to deliver solutions.
- Provided ongoing maintenance and support.

intern in Home Automation Product manufacturing , Varni Digital **Feb 2020 - Jan 2021**

- Assisted in the development and testing of IoT-based home automation products using Python.
- Conducted market research to guide product improvements and collaborated with teams to address technical challenges.
- Participated in product demonstrations and feedback sessions, contributing to documentation and reporting.
- Gained practical skills in IoT, Python, and industry knowledge.

EDUCATION

Master of Engineering in Electrical and Microsystem **March 2024 - present**
Ostbayerische Technische Hochschule (OTH) Regensburg

- Major Subjects: Electronics Production Engineering, Introduction to **AI & Machine Learning**, **Advanced Engineering Mathematics**, Deep learning, **OOP with Python**, Applied Optics, LED Technology, Applied Optoelectronics, Project Management, Advanced Semiconductor Technology.

Bachelor of Engineering in Electronics and communications **May 2018 - May 2022**
Gujarat Technological University

- Specialized coursework in **Artificial Intelligence**, **Internet of Things (IoT)**, and VLSI Design. Developed expertise in **AI algorithms**, **IoT protocols**, and VLSI circuit design methodologies. Extensive study of **C programming** language for embedded systems and software development. Engaged in projects integrating AI and IoT technologies for smart systems applications. Explored advanced concepts in **VLSI design** through practical projects and simulations. Applied C programming skills to develop efficient algorithms and software solutions. Graduated with a diverse skill set combining electronics engineering with AI, IoT, VLSI, and programming expertise.

ADDITIONAL INFORMATION

- **Programming Languages & Frameworks: Python, PHP, JavaScript, HTML, CSS, Bootstrap, jQuery, Node.js**
- **AI & Machine Learning: TensorFlow, PyTorch, OpenCV, Scikit-learn, Deep Learning, Computer Vision, Reinforcement Learning, Predictive Analytics**
- **Web Development: WordPress, REST APIs, Full-Stack Development**
- **Industrial AI Applications: Predictive Maintenance, IoT Integration**
- **Data Processing & Visualization: Pandas, SQL, Data Visualization, Google Colab, Kaggle**
- **Cloud & DevOps Tools: AWS, Docker, GitHub, Google Colab, Kaggle**
- **Languages: English (C1), Hindi (Native), German (A2)**

ABOUT ME / PERSONAL INTERESTS

- Beyond the code and creativity, I'm someone who finds rhythm in dancing, melody in singing, and beauty in the delicate strokes of henna art. I love the calm of swimming and the confidence that comes with expressing myself through fashion and modeling. Whether it's a stage, a canvas, or a runway, I enjoy bringing a touch of artistry to everything I do.

PROJECTS

AI-Driven Mental Health Support Chatbot **Case-study**

- This project involves creating a web-based mental health support chatbot that utilizes artificial intelligence to provide personalized and empathetic assistance to users experiencing mental health challenges. The chatbot integrates natural language processing (NLP) algorithms to engage in meaningful conversations, offer empathetic responses, and provide valuable resources and support tailored to users' individual needs

Smart Grid Load Forecasting with MLOps **Case-study**

- Technologies: Python, FastAPI, Docker, GitLab CI/CD, Azure, MLflow
- Built a machine learning model to forecast energy demand in smart grids.
- Developed a FastAPI-based API for real-time predictions.
- Automated model training and deployment using MLflow and GitLab CI/CD.
- Deployed the system with Docker on Azure for scalability.

Stock Price Prediction Using LSTM Neural Networks **Case-Study**

- Technologies: Python, LSTM, Flask, Machine Learning
- Built a web app for predicting stock prices using an LSTM model.
- Analyzes historical data to forecast trends and provide investment recommendations.
- Users can select stocks and view predictions via a simple interface.
- Designed for extensibility, allowing future model and stock additions.

Contour Detection using Computer Vision **Mini Project**

- Designed a system for object boundary detection, utilizing unsupervised learning techniques for image segmentation. This system demonstrates skills transferable to predictive maintenance tasks requiring precise pattern and anomaly detection in sensor data.
- Technologies Used: Python, OpenCV, Scikit-learn

Inventory Management System **Client Project**

- Technologies: Python, Django, PostgreSQL, REST API, AWS
- Built a web-based inventory management system for real-time stock control.
- Integrated supplier APIs and implemented role-based authentication.
- Optimized database performance and deployed the application on AWS.

E-Commerce Web Application **Client Project**

- Technologies: MongoDB, Express.js, React, Node.js, Stripe
- Created a full-stack e-commerce site with product listing, cart, and payment integration.
- Implemented user login and Redux-based state management.
- Improved speed and UX through responsive design and lazy loading.

Website Performance Optimization (PageSpeed Improvement Project) **Client Project**

- Technologies: React, Next.js, Webpack, Lighthouse, Google Cloud
- Boosted Google PageSpeed score from 61 to 95 by optimizing image delivery, minifying JS/CSS, and implementing server-side rendering.
- Reduced bounce rate by 30% and increased average session time through faster load times.
- Deployed optimized assets via CDN for global performance consistency.

CI/CD Pipeline Automation (DevOps Efficiency Initiative) **Client Project**

- Technologies: GitLab CI/CD, Docker, Kubernetes, AWS
- Automated build, test, and deployment workflows to reduce release time by 60%.
- Integrated static code analysis and unit tests into the pipeline for quality assurance.
- Enabled rollbacks and blue-green deployments to minimize downtime.