SACHIN MOZE

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PROFESSIONAL SUMMARY

Versatile Software Engineer and AI Specialist with nearly 6 years of experience developing innovative solutions across aerospace, healthcare, and enterprise sectors. Combines strong technical expertise in Python development, machine learning, and data engineering with a proven track record of delivering business impact. Experienced in building digital twin frameworks, real-time data processing pipelines, and intelligent automation systems. Recently I completed MSc in Artificial Intelligence, enhancing expertise in deep learning, NLP, and scalable AI architectures. Adept at translating complex technical concepts into business value through cross-functional collaboration.

WORK EXPERIENCE

Eviden (Atos)   (Mar 2023 – Apr 2024)
AI Developer | Airbus Body Bending Digital Twin System

- Developed a comprehensive digital twin framework that synchronized real-time physical aircraft measurements with AI-driven simulations, reducing assembly errors by 18%.
- Engineered Gaussian Process regression models that predicted component deformation with 94% accuracy, enabling proactive adjustments during assembly.
- Built an AI-enhanced Finite Element Method (FEM) simulation system that predicted structural behaviors under various load conditions with 96% accuracy.
- Implemented interactive production monitoring dashboards with Bokeh and Flask for real-time visualization of model predictions and manufacturing data.
- Applied advanced clustering and dimensionality reduction techniques (KMeans, t-SNE) to reveal hidden patterns in manufacturing data, improving quality control processes.
- Built a comprehensive data processing pipeline using Pandas and NumPy that transformed raw sensor data into ML-ready datasets.
- Developed modular microservices architecture with RESTful APIs using Flask blueprints, enhancing system scalability and maintainability
- Leveraged Python's multiprocessing capabilities to parallelize computationally intensive simulations, reducing execution time by 40%
- Integrated ML models with a Flask-based web dashboard, enabling engineers to visualize predictions and simulation results.
- Collaborated with cross-functional teams to ensure ML solutions addressed key manufacturing challenges

Cognizant   (Apr 2021 – Mar 2023)
Senior Python Automation Developer

- Designed and implemented automated storage cleanup across servers using Ansible and Python, integrating with Splunk dashboards to visualize cleanup history and provide complete transparency.
- Developed automated Linux audit processes for security management and vulnerability mitigation, with real-time reporting integrated into Splunk dashboards for proactive risk management.
- Built an automated password change system enabling secure, single-click updates across multiple applications and regions, significantly reducing manual effort and security risks.
- Led weekly technical discussions with clients, gathered requirements, and coordinated with cross-functional teams while facilitating client approval processes and Change Management Requests (CMRs).
- Established and maintained CI/CD pipelines using Jenkins, Git, Nexus, and AWS services (Cloud9, CodeCommit), enhancing deployment efficiency and enabling scalable automation solutions.
- Architected backend services and APIs using Flask and Django while conducting code reviews and mentoring junior developers, ensuring alignment with client expectations and seamless project delivery.

Cognizant   (Aug 2018 – Mar 2021)
Software Developer

- Migrated workflows from CA7 Scheduler to Airflow, optimizing ETL pipelines and automating new workflows to meet evolving business requirements. Configured and tested Airflow deployments across different environments, ensuring stability and efficiency before production rollout.
- Customized Airflow to enhance monitoring capabilities, implementing API integrations for real-time batch monitoring and schedule tracking, which provided daily insights to stakeholders and improved internal team efficiency.
- Automated client reporting processes by generating reports with embedded KPIs in PDF format, allowing timely and accurate distribution, and reducing manual workload.
- Developed a comprehensive dashboard reporting application with Django and JavaScript for customized data downloads in PDF and Excel formats, enhancing data visualization and accessibility for clients and internal users.
- Utilized Azure and AWS services for hosting, deployment, and monitoring, ensuring reliability and scalability across applications. Set up CI/CD pipelines to streamline deployment, reduce release times, and maintain consistent performance.
- Collaborated with cross-functional teams to gather requirements, design intuitive user interfaces, and support data-driven decision-making through analytics integrated into dashboard views.

- Followed agile methodologies to support iterative improvements, effectively managing project timelines and delivering solutions aligned with stakeholder expectations.

TECHNICAL SKILLS

- **Programming Languages & Frameworks:** Python, Django, Flask, JavaScript, SQL, React, FastAPI
- **AI & ML Technologies:** PyTorch, TensorFlow, scikit-learn, Genetic Algorithms, Gaussian Process Regression, Hugging Face, LLMs, NLP, Reinforcement Learning, Deep Learning
- **Data Engineering:** ETL pipelines, Airflow, Data preprocessing, Feature engineering, PCA, t-SNE, Pandas, NumPy.
- **DevOps & Automation:** Ansible, Jenkins, Git, Docker, CI/CD pipelines, AWS (EC2, S3, RDS, Lambda, Cloud9), Azure.
- **Monitoring & Visualization:** Splunk, Bokeh, Dashboard development.
- **Databases:** PostgreSQL, MSSQL, SQLite, MongoDB, Neo4j, GraphDB.
- **System Administration:** Linux (RHEL9, Ubuntu), Windows, REST API.
- **Soft Skills**: Analytical thinking, Strategic thinking, Team collaboration, Client communication, Agile methodologies, Critical thinking, Presentation skills, Cross-functional collaboration.

EDUCATION

Dublin Business School (DBS)   (Jan 2024 – Jan 2025)
MSc. in Artificial Intelligence (CGPA – 7.3/10)   Dublin, Ireland
- **Core Subjects:** Deep Learning, Machine Learning, Neo4j, Recommender Systems, Reinforcement Learning, NLP, GenAI, Hugging Face, LLM's, Chatbots, Finetuning Models
- **Research Project:** A Study of machine learning and AI on Citations network: Author collaboration (link) prediction.

MIT Academy of Engineering, Pune University   (June 2014 – July 2017)
BE in Electronics and Communication Engineering (CGPA – 7.2/10)   Pune, India
- **Core Subjects:** Data Structures, Linear Algebra & Complex Analysis, Software Engineering, Robotics, Information Theory and Coding, Pattern Recognition, Computer Communication, Computer Organisation, Cyber Security, Microprocessors and microcontrollers, and Solid-State Devices.
- **Final Year Project:** Vision-Based Autonomous Robot for Object Pickup and Delivery
- **Honor's & Awards:** 1. State level winner in the Mobile Robotics skill of WSI (World Skills India) and Semifinalists of World Skills which happened in Abu Dhabi 2017. 2.Organized and Led Robotics and National Level Conference paper events.

CERTIFICATIONS AND AWARDS

1. Awarded for Exceptional Contribution and Automation Initiatives 2. Awarded Top Performer in Development and Automation in Cognizant 3. Ultimate AWS Certified Solutions Architect Professional 4. Red Hat – Ansible Automation Platform 5. Fundaments of Accelerated Computing with CUDA Python, Nvidia Deep Learning Institute