

Adeesha Anjana

SENIOR SOFTWARE ENGINEER

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Professional Summary

Senior Software Engineer with 8+ years of expertise in architecting and deploying high-performance backend systems and scalable AI/ML solutions. Proven ability to lead the full development lifecycle, from concept to cloud-native deployment, driving significant improvements in operational performance, scalability, and user experience. Passionate about solving complex challenges through innovative technology and robust, efficient code.

Work Experience

EFutures | Senior Software Engineer

Jul 2024 – Present

- Designed and developed multiple microservices using FastAPI and Pydantic, ensuring robust data validation, scalability, and maintainability.
- Automated manual data entry workflows, leveraging Pandas and FuzzyWuzzy for intelligent data matching and consistency checks reducing human input time by 90% and data errors by 70%.
- Led research and development of AI-powered solutions, including a CV recommendation system that used LLMs (OpenAI GPT-3.5 Turbo) for semantic data extraction and candidate-job matching.
- Designed and implemented a lead generation platform leveraging free-tier APIs (e.g., Tavily) for data enrichment and contact discovery, optimizing cost efficiency.
- Collaborated with cross-functional teams and clients to gather requirements, validate solutions, and deliver production-ready software aligned with business goals.
- Tools & Technologies: FastAPI, Pydantic, OpenAI GPT-3.5 Turbo, Pandas, FuzzyWuzzy, Docker, Git, Tavily, REST APIs.

Keynergy | Senior Backend Engineer

Jan 2024 – Jul 2024

- Designed and managed Apache Airflow ETL pipelines processing 1M+ financial records from S&P 500/1000 datasets, ensuring 98% data accuracy and consistency.
- Improved and refactored the stock data analysis codebase, implementing Python best practices and enhancing readability and maintainability across critical data workflows.
- Conducted data validation and auditing using JetBrains Dataflow notebooks, leveraging Pandas, NumPy, and Openpyxl for large-scale data processing and reporting.
- Deployed and maintained backend services on Google Cloud Platform (GCP) using Google Kubernetes Engine (GKE), achieving high availability, scalability, and optimized performance.
- Tools & Technologies: Apache Airflow, JetBrains Dataflow, Pandas, NumPy, Openpyxl, GCP, GKE, Docker, Git.

Blackswan Technologies | Backend Engineer

Apr 2022 – Jan 2024

- Developed and maintained scalable Python microservices using Hexagonal Architecture, deploying consistently across AWS, Azure, and GCP.
- Enhanced system reliability and security by integrating SonarQube and Trivy scans, containerizing with Docker, and optimizing CI/CD pipelines.
- Engineered high-performance data solutions with Neptune Graph DB, DocumentDB, Redis, and SQLAlchemy, reducing query latency by 40%.
- Ensured code quality and observability through comprehensive Pytest unit testing and Kibana dashboards for monitoring and log analysis.
- Reduced technical debt by 30% through targeted refactoring efforts, enhancing long-term maintainability.
- Tools & Technologies: Python, FastAPI, SQLAlchemy, Redis, Elasticsearch, Kibana, Neptune Graph DB, DocumentDB, Azure Blob Storage, Amazon S3, Docker, SonarQube, Trivy, EKS, Kubernetes, Git.

Dialog Axiata | Data Analyst**Jul 2021 – Mar 2022**

- Developed and deployed statistical models and automated AWS Lambda pipelines to optimize cell signal allocation, reducing network congestion and improving coverage quality.
- Performed geospatial data analysis and visualization using Python, Pandas, and Folium to identify network inefficiencies and provide data-driven recommendations for infrastructure planning.
- Tools & Technologies: Pandas, NumPy, Folium, AWS Lambda, Jupyter Notebooks, Python.

Fiverr | Freelance Developer**Jan 2019 – Jul 2021**

- Delivered web scraping and data automation solutions using Python, Selenium, and Pandas to extract, clean, and analyze large datasets for clients.
- Developed data science workflows for trend analysis and creating actionable reports with NumPy and Matplotlib.
- Tools & Technologies: Python, Pandas, Selenium, NumPy, Matplotlib, Jupyter Notebooks, Git.

Cubo Systems | Associate Software Engineer**Jan 2020 – Mar 2020**

- Implemented an OCR-based iOS application to extract and process text from product labels, improving text-recognition accuracy by 15% through algorithm optimization.
- Integrated OCR libraries and optimized the text recognition pipeline to improve accuracy and processing speed.
- Tools & Technologies: Swift, OCR APIs, Xcode, REST APIs, Git.

Velro | Associate ML Software Engineer**Aug 2019 – Jan 2020**

- Developed automation scripts and experimental prototypes for early-stage AI chatbots using the Rasa framework, enabling natural language interactions.
- Conducted research and development (R&D) on OCR solutions for business card recognition, primarily using Python notebooks for prototyping and testing.
- Tools & Technologies: Python, Rasa, Jupyter Notebooks, OCR libraries, Pandas, NumPy.

Virtusa | Associate Test Automation Engineer (Internship)**Sep 2017 – Sep 2018**

- Contributed to the Wiley project, automating SAP application workflows using HP UFT (Unified Functional Testing) to improve testing efficiency and accuracy.
- Developed scripts to automate test cases, generate detailed test reports, and ensure smooth integration with QA processes.
- Tools & Technologies: HP UFT, SAP, Test Automation, Reporting, QA, Client Communication.

Education and Certifications**University College Dublin, BSc in Computer Science****2019****IBM, Python for Data Science****2020****IBM, Data Analysis using Python****2020****Coursera, TensorFlow for Deep Learning****2020****Skills****Backend Development** | Python, GoLang, Typescript, GRPC, Flask, FastAPI**Cloud Services** | AWS, Azure Services, GCP**Databases** | MySQL, PostgreSQL, Elasticsearch, Graph DB, Neptune DB, Redis, DocumentDB**Continuous Integration and Deployment** | Docker, Jenkins, Git**Test Automation** | Selenium**API Documentation** | OpenAPI specification, Swagger**Testing and Code Quality** | SonarQube, Trivy, Pytest**Deep Learning** | TensorFlow, Keras**Data Orchestration** | Apache Airflow**Messaging Systems** | RabbitMQ, aio_pika**Soft Skills** | Team player, Client Engagement, Agile Development