

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 Datalore 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 Datalore, 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.

Vevro | 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