

Alvin Rindra Fazrie, Sr. Data Scientist | Sr. AI Architect

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PROFILE **Sr. Data Scientist | Sr. AI Architect | MLOps/LLMOPs Lead | MLflow Ambassador** with more than **10 years** of experience in **AI and Data Projects**. **Databricks certified GenAI Engineer, Azure Data Scientist, TensorFlow, and Google Cloud Professional ML Engineer.**

WORK EXPERIENCE

Lufthansa Industry Solutions - Hamburg, Germany

Sr. AI & Data Consultant | July 2019 – Present

- Designed and deployed **production-grade AI & data solutions** on **Databricks, OpenShift, Google Cloud, and Microsoft Azure**.
- Responsible as **MLOps & LLMOPs Workmode Lead** - defined and established company-wide MLOps & LLMOPs standards and architectures.
- Developed and deployed the **Operations Research (OR)/Optimization** solution to optimize the sequence of Aircraft MRO (Maintenance, Repair, Overhaul) tasks using **CP-SAT Solver | Google OR-Tools**.
- Productionalized **GenAI/RAG Systems** for several use-cases (finance, HR, sales, & procurements).
- Developed NLP-based Document Analytics Solution - reducing MRO Engineering efforts by **15,000+ man-hours annually**)
- Architected hybrid ml systems to **optimize flight recommendation and destination**.

Tech Stack: GenAI - RAG (langchain, Ollama, Elasticsearch, Milvus, Atlas), **DL/ML** (TensorFlow 2.x, PyTorch, Sklearn, XGBoost, Catboost), **OR** (OR-Tools, HiGHs, CBC), **NLP** (gensim, spaCy, transformers), **Azure** (AKS, Azure ML SDK v2, Synapse, OpenAI), **Databricks** (Mosaic AI, MLflow, Asset Bundles, PySpark, Unity Catalog), **GCP** (AutoML, BigQuery, KubeFlow, VertexAI, TFX), **ML/LLMOPs** (MLflow, Airflow, PySpark, Docker, Kubernetes, Helm)

DTSense Academy - Remote, Online

Lead GenAI & Data Instructor | Feb 2022 – Present

- Lead and mentor a team of data scientists in various AI & data topics.
- Designed and taught end-to-end AI curricula covering **GenerativeAI - Large Language Model** and **Retrieval Augmented Generation**, AI & Machine Learning: - Supervised Learning (Vector-based: SVM & kNN; Probabilistic-based: Naive Bayes; Tree-based: Decision Tree & Random Forest, Deep Learning)
- Supervised hands-on projects, including Image Classification, Text Classification, Sentiment Analysis, and Multimodal Deep Learning models (text and audio).
- Participated in several Data Hackathons. Built Time Series (fbprophet, XGBoost) and Natural Language Processing (BERT) models.

Tech Stack: Python, pandas, scikit-learn, TensorFlow, MLflow, langchain, ollama, groq, fastapi, Looker Studio, fbprophet, XGBoost

Eraneos Analytics (previously Ginkgo Analytics) - Hamburg, Germany

Data Scientist | March 2019 – June 2019

- Developed Analytics Platform using ELK Stack (Elasticsearch, Logstash, Kibana + Filebeat)
- Implemented Anomaly Detection with Machine Learning Jobs (Single Metric and Multi-Metric), and Time-series Analysis with Visual Builder.

- Participated in **Airbus AI Challenges**: achieving high-performance anomaly detection for Airbus Helicopters Accelerometer Data. Recall: 0.94, Precision: 0.99. ML Algorithms: OneClassSVM, K-Means, KNearestNeighbour
- Built Product Classifiers with Deep Learning algorithms (LSTM, CNN) in AWS Platform.

Tech stack: TensorFlow, scikit-learn, AWS (Sagemaker, Redshift, Quicksight, Lambda), Azure (SSIS, Azure Data Factory, Power BI)

University of Hamburg - Hamburg, Germany

Research Assistant - Language Technology Group | Sep 2017 – Aug 2018

- Developed AI-driven tools for investigative journalism and data-driven approach, including **news/leak** 2.0 (Network of Searchable leaks), Science and Data-Driven Journalism tool <http://www.newsleak.io/>, and **autolinks** (automatic proactive researching) - <https://uhh-lt.github.io/autolinks>, under the supervision of Prof. Chris Biemann.

Tech stack: Python, Scala Play, AngularJS, NodeJS, Elasticsearch, Docker, PostgreSQL, NLP components: UIMA, cTAKES, Polyglot-NER.

HAUSGOLD, xrails, quantilope - Hamburg, Germany

Full-Stack Developer | Feb 2015 – Jan 2018

- Built analytical dashboards and market research platforms across startups. Delivered full-stack solutions with modern frontend and backend technologies in agile environments.

Tech stack: Frontend: Python, ReactJS, SCSS, Webpack, E2E Test: NightwatchJS. Backend: MeteorJS, Ruby on Rails, PostgreSQL, Docker

EDUCATION

UNIVERSITY OF HAMBURG - Hamburg, Germany

M.Sc. Master of Intelligent Adaptive Systems | Oct 2014 – Dec 2018

- Focus areas: Artificial Intelligence, Machine Learning, Neural Networks / Deep Learning
- Worked on the research/projects: Reinforcement Learning and Natural Language Processing

UNIVERSITY OF DUISBURG-ESSEN - North Rhine-Westphalia, Germany

SAP ERP & Business Intelligence Program | Nov 2014 – Mar 2017

- Completed SAP modules in Enterprise Resource Planning, Business Intelligence, and Advanced Business Application Programming.

UIN Jakarta - Jakarta, Indonesia

B.Sc. Computer Science | Sep 2009 – Oct 2012

- Focus areas: Software Engineering and Artificial Intelligence.
- 1-year Study Abroad in IIUM, Malaysia. 3 months working as an Associate System/BI Developer.
- Thesis on Natural Language Processing and its implementation in the Tizen Operating System.

PROFESSIONAL CERTIFICATIONS

Databricks Generative AI Engineer Associate | Nov 2025 - Nov 2027

Microsoft Open Hack Certification: <https://www.credly.com/badges/592717f2-ed7b-41bc-bd93-ca86d2333ee7>

Skills: Azure Data Lake Storage, Azure Data Factory, Azure Databricks, Azure DevOps, and Azure Synapse Analytics

Azure Data Scientist Associate | July 2023 – Aug 2026

Microsoft Azure Certification: <https://learn.microsoft.com/en-us/users/alvinrindra/credentials/eeca8947aecbb75a>
Skills: AzureML, AutoML, MLDesigner, MLFlow, MLOps, Azure Pipelines, GitHub Actions, ResponsibleAI, Databricks

Professional Machine Learning Engineer | April 2022 – April 2024

Google Cloud Certification: <https://www.credential.net/profile/alvinrindrafazrie965276/wallet>

Skills: TensorFlow2.x, TFX, KubeFlow, VertexAI, BigQuery, Apache Beam, AutoML, Natural Language API, Video Intelligence API, Dataproc, Dataflow, MLOps

TensorFlow Developer | July 2020 – July 2023

Google/TensorFlow Certification: <https://www.credential.net/profile/alvinrindrafazrie965276/wallet>

Skills: TensorFlow2.x, Supervised Learning (Classification & Regression), NLP, Computer Vision, Time-Series

Production Machine Learning Systems; MLOps; MLpipelines | Jan 2022

Coursera Certificates: <https://coursera.org/verify/BQ2QJPZ7KXX>,

<https://coursera.org/verify/professional-cert/K6N69EUFWKBP>

RESEARCH PUBLICATIONS

Action Selection Methods in a Robotic Reinforcement Learning Scenario. Cruz, F.; Wüppen, P.; Fazrie, A.; Weber, C.; Wermter, S. - Nov 2018

5th IEEE Latin American Conference on Computational Intelligence, LA-CCI. Tech stack: Python, NumPy, matplotlib. Link: <http://la-cci.org/la-cci-2018/accepted-papers-2018/>.

Agent-advising Approaches in an Interactive Reinforcement Learning Scenario. Cruz, F.; Wüppen, P.; Magg, S.; Fazrie, A.; Wermter, S. - Sep 2017

2017 IEEE International Conference on Development and Learning and Epigenetic Robotics (ICDL-EpiRob). Tech stack: Python, NumPy, matplotlib. Link: <https://ieeexplore.ieee.org/document/8329809>.

SKILLS & INTERESTS

Technical Skills: Python3.x, **AI/Data Science** (TensorFlow2.x, PyTorch, scikit-learn, mlxtend, statsmodels, fbprophet, OR-Tools), **Data Engineering** (PySpark, AirFlow, Azure Synapse), **MLOps & Platforms** (VertexAI, TFX, AzureML, Databricks, MLflow), **Data Visualization** (Dash & plotly, streamlit, Looker Studio, Amazon Quicksight), **Backend** (RestAPI, FastAPI, Flask), **AI/Data Governance** (MLflow, Unity Catalog, Purview), ResponsibleAI (fairlearn, AI scorecard, interpret, SHAP), **GenAI/AgenticAI** (langchain, OpenAI, Ollama, semantic kernel, huggingface), **Computer Vision** (OpenCV, skimage), **Logs and Monitoring** (Prometheus + Grafana, Elasticsearch + logstash + Kibana)

Interpersonal: Communication, Emotional Intelligence, Teamwork, Attention to detail, Problem-Solving, Self-management, Leadership

Languages: English (Full professional proficiency), German (Working Proficiency), Indonesian (Native), Malay (Fluent)

Interests: Data Science, ML/Data Engineering, AI System Architecture, Mentoring, Boxing, Swimming, Organizations, Community & Charity Work