#### Alvin Rindra Fazrie, Senior Data Scientist

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LINKS <a href="https://alvinrindra.github.io/">https://alvinrindra.github.io/</a>, <a href="https://alvinrindra.github.io

**PROFILE** Senior Data Scientist with more than 8 years of experience in AI and Data Projects. Certified Azure Data Scientist, TensorFlow, and Google Cloud Professional ML Engineer.

#### WORK EXPERIENCE

### **Lufthansa Industry Solutions Senior AI and Data Consultant**

Hamburg, Germany July 2019 – Present

- Developing and deploying AI/ML/Data solutions to the production with Red-Hat OpenShift AI Platform, Google Cloud, and Microsoft Azure.
- ML Engineering Projects:
  - o Responsible as MLOps Work mode Lead Defining companies' MLOps best practices and architectures
  - o Developing and Deploying Flight Recommendation Systems using Hybrid Machine Learning Models.
  - Developed and deployed Document Similarities model to save 15K Man hours of MRO engineers annually
  - Developed custom Autoscaling system, deployed OpenCV Jobs, and created Load Analysis
     Dashboard for Advanced Driver Assistance Systems
     ML Models: LSTM, BERT, Naive Bayes, Support Vector Machine, TFIDF + Cosine Sim.
- Data Engineering: Developing ETL Pipeline (AirFlow, Azure Synapse), Ingesting ML Metadata, and enabling Impact Analysis
- Data Mesh (Data Catalog and Governance): Datahub, Zeenea, MS Purview

Tech stack: TensorFlow 2.x, PyTorch, Sklearn, gensim, Flask, Airflow, PySpark, docker, OpenCV, Kubernetes, Helm, Terraform, Pylint, Pytest, Openshift AI Platform, GCP (AutoML, BigQuery, KubeFlow, VertexAI), Azure (AKS, Azure ML SDK V2, Synapse), MLFlow, langchain, OpenAI.

### DTSense Academy Lead Data Science Instructor

Remote, Online

July 2020 – Present

- Leading a team of data science instructors with the following topics:
- AI & Machine Learning: Supervised Learning (Vector-based: SVM & kNN; Probabilistic-based: Naive Bayes; Tree-based: Decision Tree & Random Forest, Deep Learning)
- Unsupervised Learning (Hierarchical & Agglomerative Clustering, Market Basket Analysis, & Principal Component Analysis) and Reinforcement Learning
- Built various projects ranging from Image Classification, Text Classification, Sentiment Analysis, to Multimodal Deep Learning models (text and audio) using state-of-the-art architecture such as Transformer (BERT & GPT-2) for text processing
- Participated in several Data Hackathons. Built Time Series (fbprophet, XGBoost) and Natural Language Processing (BERT) models.

# Ginkgo Analytics

Hamburg, Germany March 2019 – June 2019

**Data Scientist** 

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

- Participated in Airbus AI Challenges: Developed Time Series model for Airbus Helicopters Accelerometer. Recall: 0.942, Fbetascore: 0.99, Precision: 0.99. ML Algorithms: OneClassSVM, K-Means, KNearestNeighbour
- Built Product Classifiers with Deep Learning algorithms (LSTM, CNN)

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 new/s/leak 2.0 (Network of Searchable leaks), Science and Data-Driven Journalism tool
 <a href="http://www.newsleak.io/">http://www.newsleak.io/</a> and autolinks (automatic proactive researching) <a href="https://uhh-lt.github.io/autolinks">https://uhh-lt.github.io/autolinks</a>, under the supervision of Prof. Chris Biemann.

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

### HAUSGOLD, xrails, quantilope

Hamburg, Germany

**Full-Stack Developer** 

Feb 2015 – Jan 2018

• Developed analytical dashboards and market research software in three different startups.

Tech stack: Frontend: 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.

Sep 2014 – Dec 2018

- Courses, e.g. 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

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

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

#### PROFESSIONAL CERTIFICATES

**Azure Data Scientist Associate** 

July 2023 – Aug 2024

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

#### **Open Hack: Azure Cloud-Based Data Warehousing**

May 2022

Microsoft Open Hack Certification: <a href="https://www.credly.com/badges/592717f2-ed7b-41bc-bd93-ca86d2333ee7">https://www.credly.com/badges/592717f2-ed7b-41bc-bd93-ca86d2333ee7</a> Skills: Azure Data Lake Storage, Azure Data Factory, Azure Databricks, Azure DevOps, and Azure Synapse Analytics

#### **Professional Machine Learning Engineer**

April 2022 – April 2024

Google Cloud Certification: <a href="https://www.credential.net/profile/alvinrindrafazrie965276/wallet">https://www.credential.net/profile/alvinrindrafazrie965276/wallet</a>
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: <a href="https://www.credential.net/profile/alvinrindrafazrie965276/wallet">https://www.credential.net/profile/alvinrindrafazrie965276/wallet</a>
Skills: TensorFlow2.x, Supervised Learning (Classification & Regression), NLP, Computer Vision, Time-Series

# **Production Machine Learning Systems; MLOps; MLPipelines**

Jan 2022

Coursera Certificates: <a href="https://coursera.org/verify/BQ2QJPZ7KXX">https://coursera.org/verify/professional-cert/K6N69EUFWKBP</a>

### Deep Learning Specialization (DNN, CNN, RNN)

Sep 2018

deeplearning.ai: DXLWRFC2C9TL, (Tensorflow, Keras, Scikit-learn)

https://coursera.org/verify/specialization/DXLWRFC2C9TL

#### 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: <a href="http://la-cci.org/la-cci-2018/accepted-papers-2018/">http://la-cci.org/la-cci-2018/accepted-papers-2018/</a>.

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: <a href="https://ieeexplore.ieee.org/document/8329809">https://ieeexplore.ieee.org/document/8329809</a>.

#### **SKILLS & INTERESTS**

**Technical:** Python3.x, Data Science (TensorFlow2.x, PyTorch, scikit-learn, mlxtend, statsmodels, fbprophet, huggingface), Data Engineering (PySpark, AirFlow, Azure Synapse), ML Engineering (VertexAI, AzureML, MLFlow, TFX), Data Visualization (Matplotlib, seaborn, Dash + plotly, streamlit), Backend (RestAPI, FastAPI, Flask), Data Catalog and Governance (datahub, MSPurview), ResponsibleAI (fairlearn, AI scorecard, interpret, SHAP), NLP (blob, gensim, NLTK, polyglot-NER, LLM - langchain, OpenAI), Computer Vision (OpenCV, skimage), Deployment (Terraform + Helm, Kubernetes, Docker, TFServing), Logs and Monitoring (TensorBoard, Azure Monitor, Prometheus + Grafana, Elasticsearch + logstash + Kibana), Testing (PyTest, unittest, great expectation), javascript, scala, java.

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

Language: English (Very good command), German (Working Knowledge), Indonesian (Native Speaker), Malay (Highly Proficient)

Interests: Data Science, ML/Data Engineering, Organizations, Charity, Knowledge-sharing, Boxing, Swimming