Andreas Lay

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Senior Data Scientist with strong expertise in ML, Statistics, Time Series Forecasting & Software Engineering

Experience

Senior Data Scientist
REWE Group

📅 Since Aug 2019 📍 Cologne, Germany

- Architecture & development of analytical applications including dockerized deployment in Google Cloud
  - Setting up CI/CD pipelines: Cloud Run, Cloud Build Github Actions
  - Data engineering: Setting up streamed / scheduled ELT jobs using dbt, Snowflake, Kafka & BigQuery
  - Modelling & implementation of time series forecasts + optimization algorithms
- Infrastructure-as-code: Automatized deployment of cloud resources using Terraform
- Architecture & implementation of custom analytics platform in Google Cloud: Load balancing, authentication, app deployment templates, CI/CD pipelines
- Modelling of fraud probability for ECOM business
- Building of customer segmentation workflow using Apache Beam and Dataflow
- Supporting ECOM business units in their decisions with high-quality data analysis and modelling
- Support of testing team in designing and evaluating A/B tests on website and app

Credit Risk Modeler
Deutsche Bank AG (formerly Deutsche Postbank AG)

📅 Oct 2015 — Sep 2019 📍 Bonn, Germany

- Modelling of loan default probability and credit loss rates for the retail customers portfolio used for lending decisions and capital requirements
- Setting up and deployment of automatized model monitoring to ensure model stability and performance
- Project work with respect to fully integrating Postbank into Deutsche Bank Group

Market Risk Management Intern
DZ Bank AG Singapore Branch

📅 Sep 2014 — Jan 2015 📍 Singapore

- Analysis of market risk positions for Capital Markets as well as Treasury portfolios (Value-at-Risk, risk factor sensitivity analysis)
- Daily P&L reporting and corresponding analysis using Murex

Scholarships

Friedrich Ebert Foundation
Academic merit scholarship granted by the Friedrich Ebert Foundation for the duration of a two year master's programme

Education

MSc in Quantitative Economics
University of Tübingen

📅 Oct 2013 — Sep 2015 📍 Tübingen, Germany

GPA: 1.6*

BSc in International Economics
University of Tübingen

📅 Oct 2009 — May 2013 📍 Tübingen, Germany

GPA: 1.6*

Exchange Student
National Taiwan University

📅 Aug 2011 — Feb 2012 📍 Taipei, Taiwan

Abitur (A-Levels)
Saarlouiser Gymnasium am Stadtgarten

📅 Graduation: May 2009 📍 Saarlouis, Germany

GPA: 1.7*

*On a scale from 1.0 to 4.0 where 1.0 is the best

Skills

Programming / IT

Languages
Python • R • SAS • SQL • HCL • VBA • Stata • Matlab

Frameworks
scikit-learn • xgboost • pandas • numpy • plotly • django • fastapi • py- torch • Streamlit

Tooling
Google Cloud Platform • git • Github • Gitlab • docker • terraform • dagster • nginx • dbt • Jira • Confluence

Databases & Streaming
BigQuery • Snowflake • PostgreSQL • Oracle • Teradata • Db2 • Kafka • Beam • GCP Pub/Sub

Languages

German (native speaker) • English (fluent) • Spanish (conversational) • Mandarin Chinese (basic)