Dr. Philipp Alexander Thompson

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Websites: GitHub | LinkedIn

Place of Birth: Bremerhaven

Date of Birth: 21.12.1990

Professional Experience

12/2023 – heute **Specialist Credit Risk Controlling**, Berlin Hyp AG

- Responsible for methodology of the credit portfolio model (CVaR) and IFRS9 ECL estimation, as well as parameters including PD curves and LGD.
- Conducted portfolio-level credit, counterparty, and country risk analysis, including limit monitoring, stress testing, and scenario analysis.
- Produced regular risk reports including key risk indicators, ad-hoc analyses, and risk concentration metrics.
- Developed and maintained cross-departmental data pipelines and interfaces for risk data management and aggregation.
- Queried and analyzed vast amounts of data from relational database systems (Oracle, SAP HANA), using SQL and Python.
- Built automated analytics and reporting tools using Python (Pandas, Matplotlib).

06/2022 – 11/2023 **Postdoctoral Researcher** – Freie Universität Berlin (Department of Economics)

- Led data collection and analysis in the research project *"Laws of Social Cohesion"*.
- Applied **machine learning (ML) and deep learning (DL)** to complex social datasets, including text classification and prediction models.
- Achieved **89% prediction accuracy** on reputational risk modeling (media scandal forecasting) using DL (TensorFlow, Keras, Python, R).

04/2017 – 05/2022 **Research Associate** – Freie Universität Berlin (Department of Economics)

- Conducted econometric analysis of firm-level investment behavior using panel data regressions.
- Designed and led undergraduate courses on Corporate Governance and HR strategy.
- Tools used: Python, R, Stata.

10/2016 – 03/2017 **Project Assistant**, research project INCAS

Studium

04/2017 – 06/2022	**Doctorate in Economics,** Freie Universität Berlin Graduated *summa cum laude.* Visiting Researcher at Waseda University, Tokyo.
10/2014 – 09/2016	**M.Sc. in Management & Marketing,** Freie Universität Berlin Final Grade: 1,4 (very good); exchange semester at Nanjing University, China
10/2010 – 03/2014	**B.Sc. in Business Administration**, Freie Universität Berlin Final Grade: 1,5 (excellent); exchange semester at Kyoto University, Japan

Selected Projects

For detailed information, see **GitHub website**.

- **Scandal Prediction through Deep Learning** – Developed DNN model to forecast media scandals from annual report texts, achieving 89% accuracy.
- **Checking Boxes or Championing Change?** – Leveraged quantitative text analysis and NLP to classify reporting patterns, identifying signals in companies' reports that help predict future performance.
- **Drivers of the Financialization of Nonfinancial Firms** – Implemented advanced econometric models to identify drivers of nonfinancial firms' investment in financial assets.

Fähigkeiten und Kenntnisse

- **Quantitative Methods**: Credit risk modeling (IFRS9 ECL, PD/LGD modeling), stress testing (application of macroeconomic scenarios), scenario analysis, machine learning, deep learning, econometrics, benchmarking, sensitivity analysis.
- **Programming & Tools**: Python (Pandas, NumPy, scikit-learn, Keras, TensorFlow), Jupyter Notebooks, R (tidyverse, quanteda), SQL, Stata.
- **Databases**: Oracle, SAP HANA, relational DBs.
- **Reporting & Automation**: Automated report generation, visualization, documentation of model methodologies.
- **Soft Skills**: Analytical thinking, precision, team collaboration, interdisciplinary communication, project/time management.

Languages: German (native), English (native), Spanish (advanced)

Weiterbildungen und Zertifikate

- TensorFlow Developer Certification, TensorFlow
- Machine Learning Professional Certificate, IBM
- Databases and SQL for Data Science with Python, IBM
- Data Science - Text Analysis (Text Mining) Using R, LSE
- Data Analytics Professional Certificate, Google

Berlin, den 27.07.2025