Selami Doğan Akansu

E-mail: <u>sdakansu@gmail.com</u> Linkedin: <u>www.linkedin.com/in/selamidoganakansu</u> Website: https://sdakansu.github.io

EDUCATION

Goethe University, Frankfurt am Main/GERMANY

Oct 2025 - Present

• Ph.D. candidate in Finance, GSEFM, SAFE

Eberhard Karls University of Tübingen, Tübingen/GERMANY

Oct 2022 – June 2025

• Master's Degree in Economics and Finance

Sabanci University, Istanbul/TURKEY

Oct 2016 - July 2022

- Bachelor's Degree of Science in Computer Science
- Bachelor's Degree of Arts in Management, Minor in Finance

AWARDS AND ACHIEVEMENTS

- Awarded Full Tuition Scholarship of Sabanci University
- Received Dean's High Honor List recognition three times
- Received Dean's Honor List recognition four times

MASTER'S PROJECTS

Valuation of Volkswagen AG

January 2024

- Using APV and WACC approaches, Volkswagen AG (VW) is valued on January 01, 2024.
 Weighted Cost of Capital (WACC) approach is performed with an assumption of constant debt ratio
 over time. Using Adjusted Present Value (APV) with a constant debt amount over time, the result is
 deviated from the market cap. By adjusting the debt amount over time, the estimated equity value
 intersected with the market cap of VW.
- Sensitivity analysis is studied on WACC approach and pointed sensitive parameters of the company.
 Option to wait one year is studied with empirical free cash flows (FCF).
 Merton model is applied to find the adjusted debt ratio and credit spread with accounting default risk.

Proximity Penalty of COVID-19 "Outbreak" on Stock Markets

August 2023

• This project investigates the effect of COVID-19 on stock market returns, specifically focusing on the geographical proximity to the epicenter of the outbreak, Wuhan. By examining the relationship between distance to Wuhan and stock market returns, this study aims to shed light on the influence of geographical proximity on the financial implications of the pandemic.

Valuation of Express Certificate on Royal Dutch Shell Company

July 2023

- Performed a valuation of an express certificate on Royal Dutch Shell Company using
 Monte Carlo Simulation and Portfolio Insurance strategies. Using Geometric Brownian Motion
 with 65,536 observations, probable pricing paths of the underlying were simulated.
- Sensitivity and stress scenario analyses were conducted to measure the effectiveness of put option
 fractions in portfolios, revealing significant average estimated returns under different conditions.
 Risk management strategies, such as including put options in portfolios, were explored to manage
 tail risk. The study provided insights into product characteristics, early termination scenarios, and
 risk management practices in the context of financial derivatives.

RESEARCH EXPERIENCE

Deep Learning Transcription Tool for Ottoman Writings (Publication)

2021 - 2024

- Detecting optical characters from Ottoman writings with computer vision methods
- Transcribing Arabic letters to Latin letters using RNN-BiLSTM (deep learning) model

Improving Deep Kinase Zero Shot Learning Program (DeepKinZero) PURE Project - Poster

July – August 2019

Analyzed protein – kinase database: Gene Ontology similarities of kinases and proteins
calculated, implemented as an improvement to DeepKinZero. Prepared a poster which
presented the findings.

Representation Learning for Customers - (Word2Vec) PURE Project

January – July 2019

• Generated an abstract customer database, used Word2Vec to predict customer behavior via word embeddings and vector space production, hypothesized its use in marketing fields.

Automata and Finite State Machines PURE Project - Poster

January - July 2018

- Selected for the Spring Semester Program for Undergraduate Research at Sabanci University,
- Collaborated with a team to decrease the complexity (from exponential to polynomial) of unique input-output sequence of finite state machines using synchronizing heuristic.

WORK EXPERIENCE

Research Assistantship (HiWi), Prof. Anna Gumpert in University of Tübingen

Feb 2023 – Present

- Helping professors to conduct their research by implementing deep learning models, computer science methods, data visualization and analysis.
- Performed Orbis dataset preprocessing, data cleaning and on-demand dataset preparation in Stata.

Intern at Brisa, YNKD (Data Science) Internship

Sept - Oct 2021

- Developed a deep learning model that facilitates the tire factory's operations.
- Labeled 2000 images for "Digital Tire Assistant" project.

 The project received the jury's **special award** among Sabanci Holding companies' projects.
- Presented my contributions, including the deep learning project, to the company's managers.

Intern at Turkish Aerospace Industries (TUSAS), Purchasing Department

June – August 2021

- Improved the inventory system for tracking records of purchases in Excel
- Integrated financial records which come from different sources
- Developed a system that detects errors and omissions of purchasing records using Excel VBA

EXTRACURRICULAR ACTIVITIES

Founder of Finance Society, Sabanci University

2021-2022

- Conducted seminars with capital market professionals
- Helping many students to take the first step to finance
- Directing club members to learn financial operations with demo portfolios

Project and Networking Coordinator at Sabanci University Young Entrepreneurs Club

December 2018 – January 2019