

# Curriculum vitae

## Personal data

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**Name:** Hakan K.

### Technical Knowledge and Skills

Python, Statistics



Hakan is NLP research and machine learning engineer. Mainly focused on NLP research and development. Eager to learn different technologies like Blockchain, web frameworks.

## Education

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September 2022 –  
Present

Istanbul, Turkey  
Master's degree, Artificial Intelligence, Bahcesehir University

September 2010 –  
September 2014

Ankara, Turkey  
Bachelor's degree, Matematik, Middle East Technical University

## Work experience

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September 2021 -  
Present

Telecommunications company, Turkey, Istanbul  
AI Researcher NLP

### Stack:

- Natural Language Processing (NLP),
- PyTorch,
- BERT,

- Deep Learning,
- Machine Learning
- Node.js

**Responsibilities:**

- Address tagging for Turkish and Arabic (CRF, Bi-LSTM, transformers).
- Candidate Generation for Turkish, choose the best candidate via greedy search algorithm.
- Java Development.

April 2021 -  
October 2021

**Bank, Turkey, Istanbul**  
Data Scientist

**Stack:**

- SAS (Programming Language),
- Python,
- SQL,
- Data Science

**Responsibilities:**

- IFRS Risk Optimization Project Data Preparation Assistance.
- Small Business Segment Project by Random Forest Classifier and XGBoostIFRS.

December 2019 -  
May 2021

**Software Development Company, Turkey, Istanbul**  
Machine Learning Engineer

**Stack:**

- Natural Language Processing (NLP),
- Machine Learning,
- Python,
- SQL.

**Responsibilities:**

- NLP,
- AutoComplete,
- SpellChecker,
- Text Classification, (next word prediction)
- Diagnostic Analytics,
- Time Series Forecasting Built the backend with

serverless Node.js connecting RDS in AWS;

## **Insurance Company, Turkey, Istanbul**

Technical Analysis Research and Development Assistant Specialist

### **Stack:**

- Presentation Skills,
- SQL,
- Data Analysis,
- Microsoft Excel Express.

### **Responsibilities:**

- Predictive analysis of customer retention and policy renewal counts.
- Using Machine Learning linear regression model, predicting and scoping the income.
- Monthly analysis and reporting products of motor insurance department.
- Regular monitoring profitability and its reporting to management.
- Adjusting 'base premiums', 'coefficients of vehicle technical features' (like model, HP, vehicle price) based on analysis with management approval.
- Optimizing the premium from customer to customer.
- Reporting and comparing all companies in the market by their total premium, total policy number and average premium and its breakdown by city, type of vehicle etc. Developed the backend with Node.js connecting to Google Cloud storage.

July 2017 -  
June 2018

## **Bank, Turkey, Istanbul**

Credit Analysis Assistant Specialist

### **Stack:**

- Presentation Skills,
- SQL,
- Data Analysis,
- Microsoft Excel Node.js.

### **Responsibilities:**

- Preparation of the regular reports to Credit Risk Management Committee such as classification changes of the portfolio and changes in risk breakdown by classification; rating/scoring override caps and numbers.
- Monitoring utilization exceptions and verifying their compliance with the Credit Policy and Bank's risk appetite.
- Monitoring the application of the discussed action

plans at Credit Risk Management Committee to ensure sound credit portfolio and reporting outcomes to the Top Management.

- Regular Credit Policy monitoring and presentation of outcomes.
- Preparing ad-hoc analysis and reports to Credits EVP and head of business line (eg. Risk weighted average PD analysis of the Bank).
- Monthly analysis of top 100 companies having highest exposures in the Credit Portfolio.
- Monitoring the compliance of the sector concentration limits determined in bank risk appetite for all risk types.
- Monitoring and reporting limits allocated for counterparty banks.
- Supporting other business lines in terms of data analysis of credit portfolio.
- Performance analysis of the Credit Authorities based on NPL ratios, quality of credit decisions, number of approved credits and total limit size Did QA for the front-end deliverable from dev team.
- Built front-end pages for internal admin features.