

PYTHON & BACK-END DEVELOPER | DATA ENGINEER

#### **Details**

Tenstagången 55, Lgh:2304 Stockholm, 16364 Sweden +46 76-445-8880 balsever@kth.se

## Links

Personal Web Page

ResearchGate

LinkedIn

GitHub

#### **Skills**

Python

SQL

CI/CD

Deep Learning

Machine Learning

Apache Spark & Airflow

AWS - GCP - Azure Cloud Services

# **Current Occupation**

Recently, I've been working at KTH Royal Institute of Technology in a European
Union project to develop back-end, database, ml pipeline, and visualization
tool (GUI) for their big data. (6 months project)

# **Background**

- 4 years of professional working experience with Python.
  - I can write APIs, Modules, Packages, and overall applications with useful comments and OOP principles.
  - Experience with Django, Flask, FastAPI, and back-end development of web applications and REST APIs.
  - Experience with Docker.
- 4 years of experience and good understanding of Cloud services.
  - I have used AWS, GCP, and Azure. I can store data in storage or DB, build a pipeline to select features, and run compute services (either integrated or custom).
  - Hosting, CI/CD, Git, production environment management.
  - I can easily adapt to new tools.
- Knowledge of C++, C#, Ruby, HTML, CSS, and JS(I can easily read, understand, and do bug fixing).
- Broad understanding of AI / ML / DL with the ability to model design using both Sequential and Functional API(TensorFlow).
- Knowledge of blockchain, smart contracts, PoW-PoS concepts, and cryptocurrencies.

#### **Interests**

- Improvement of private and corporate finance using big data and machine learning.
- Interdisciplinary work between big data, deep learning, and parallel processing.

## **Education**

### Visiting Researcher | ML & DL, Halmstad University

JANUARY 2022 - JUNE 2022

- Under the Erasmus Exchange Program
- Comparative analysis of learning systems(all types of machine learning).
- Development of Object Pose estimation for an industrial robotic arm with Scalable TensorFlow model on Spark Cluster.

### **Doctoral Student in Deep Learning, Istanbul University**

SEPTEMBER 2019 - DECEMBER 2022

 Member of Computational Intelligence and Machine Learning Research Lab(CIML)

### BSc & MSc in Electronics Engineering, Istanbul University

SEPTEMBER 2010 - DECEMBER 2018

- Focused on Artificial Intelligence.
- BSc Final project: Vehicle with Ultrasonic Eye
- MSc Thesis: Estimation of Energy Consumption Demand with Artificial Intelligence Methods

# **Experiences**

## Data Engineer, KTH Royal Institute of Technology

JUNE 2022 - PRESENT

- Under the Erasmus Exchange Program
- Database & Back-end design | Data migration | GUI & Visualization
- Storing experiments' data in a manageable way, analyzing using ML, and creating report pages using visualization tools(Streamlit, etc.).

### **Data Engineer, RNV Analytics**

OCTOBER 2021 - JUNE 2022

- Stock allocation service design (k-libre) using Apache Spark.
- FedEx wrong surcharges analysis.
- Data Warehouse design for sales prediction in retail sector(clothing-VFCorp, Yargici, and Dagi).
- AWS (ec2, rds, s3, lambda)
- Azure (vm, data factory, sql)
- GCP (dataproc, storage, compute, bigquery)

#### AI/ML Developer, Entertech Istanbul

JANUARY 2021 - JUNE 2021

- Back-end development for a web application.
- Deep learning model development in text generation(Turkish).

#### AI/ML Developer, ITU Cekirdek

JANUARY 2020 - DECEMBER 2020

- MVP hardware design using Raspberry Pi, highly accurate sensors, and cameras.
- Development and training TensorFlow model for keyword detection on voice data
- Fine-tuning of pre-trained model for Firearm detection.

#### Software Developer, Corvisio

JUNE 2019 - NOVEMBER 2019

• Worked as a full-stack developer on CRM & OKR software.

### Backend & System Design Engineer, Branson GPU Farm

JANUARY 2018 - APRIL 2019

• Worked as a back-end system developer and as well as a network engineer on a mining cluster in bash scripting, Python, and C++.

## PLC Programmer | Automation Engineer, Golday Kauçuk

AUGUST 2016 - DECEMBER 2016

- Performed minor maintenance and repairs on PLC machines and equipment as necessary.
- Oversaw production to ensure safe practices and equipment function.