Koralp Catalsakal

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in kcatalsakal ⍟ koralpc

Education

K.U. Leuven   **Leuven, BE**
Master of Science in Computer Science / A.I.   *Sept 2018 - Jun 2020*

- Graduated cum laude
- **Coursework** : Data Mining, NLP, Evolutionary computing,Computer Vision
- **Thesis Topic** : Machine Learning in Shapley Space
  - Best thesis award by Colruyt Group BE

Bilkent University   **Ankara, TR**
Bachelor of Science in Electrical and Electronics Engineering   *Sept 2014 - June 2018*

- Graduated magna cum laude
- **Coursework** : Algorithms, Data Structures, Neural Networks, Statistics & Data Analysis
- Received full scholarship for ranking $354/2,000,000$ in Undergraduate Placement Examination.

Case Western Reserve University   **Cleveland, OH,USA**
Exchange program in Electrical and Computer Engineering   *Jan 2017 - May 2017*

Experience

Invitae   **Leuven, BE**
Software Developer / Machine Learning   *Sept 2020 - Present*

- Designed and implemented an Object detection & OCR based PDF text extraction pipeline for structured information extraction from scientific publication
- Implemented and maintained the back-end structure of NLP driven web editor for entity mining.
  - Took part in the design of main API service and the interactions with micro-services (Parsing service, Entity miner, DB, data ingestion service)
- Implemented a Tensorflow based genome sequence classification library
  - Pre-trained masked language models for genome sequence classification tasks over GCP.

Humain NV   **Leuven, BE**
Entrepreneurship Practice   *Oct 2019 - May 2020*

- Trained and deployed a custom Named Entity Recognition model for recognizing AI related terms in news articles
- Created a self-updating website layout with D3.js for updating knowledge-base of system in each user search

Nokia Bell Labs   **Antwerpen, BE**
Summer Intern / Machine Learning   *July 2019 - Aug 2019*

- Implemented an iterative local search solution for LSTM based time-series forecasting in memory access data.

Aselsan Inc.   **Ankara, TR**
Engineering Intern   *June 2017 – July 2017*

- Designed a simulation model of an e-vehicle on MATLAB
- Analyzed real-life bus route data from the municipality for simulation and testing.

Projects   For more, check my github or personal website!

Personal Webpage
o Tech Stack : React, ExpressJS
o Coded my personal webpage from scratch using React front-end and express back-end.

Web Deployed Chatbot
o Tech Stack : Python,Flask,Docker,Amazon EC2
o Implemented a LSTM based simple Chatbot model for remote web deployment on an EC2 instance

Visual Question Answering
o Tech Stack : Python,Keras
o Implemented a RNN + CNN based multimodal architecture to be used in visual question answering task

Geographic Tweet Visualization
o Tech Stack: Python,MongoDB
o Analyzed tweets related to a certain topic and demonstrated a geographic visualization of tweets over location

Skills

o Machine Learning: Tensorflow, Pytorch(beginner), Spacy, Sklearn
o Data Analysis/Visualization
o Software Development - Python,Javascript,React

o SQL, NoSQL, Cloud (Datastore,S3)
o Source/Version Control - Git
o Linux, Docker, K8s
o GCP, AWS

Extracurricular

Bilkent University   **Ankara, TR**
Undergraduate Teaching Assistant   *Jan 2016- May 2016*
o Supervised and helped a group of 8-10 students in object oriented programming exercises.
o Practiced code debugging and grading of individual project submissions

Bilkent University   **Ankara, TR**
Voluntary Teacher   *Jan 2016- May 2016*
o Involved in voluntary work with social responsibility organization in the campus.
o Gave lectures to students of 4-5 people about high-school mathematics and physics.