

Koralp Catalsakal

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EDUCATION

KU LEUVEN

MSC IN COMPUTER SCIENCE

Sep 2018 - Present | Leuven, BE
Master track in Artificial Intelligence

BILKENT UNIVERSITY

BSC IN ELECTRICAL AND ELECTRONICS ENGINEERING

Sep 2014 - Jun 2018 | Ankara, TR
College of Engineering
Summa Cum Laude
Cum. GPA: 3.73 / 4.0

CASE WESTERN RESERVE UNIVERSITY

Jan 2017 - May 2017 | Cleveland, OH
Non-degree exchange programme in
Electrical and Computer Engineering

SKILLS

LANGUAGES

Turkish : Native | English : Bilingual |
Dutch : Elementary

TECHNICAL

Python Stack

Python • Scikit-Learn • Numpy • Pandas
Big Data Stack

AWS • SQL • Amazon EMR • Linux
ML Stack

Keras • Tensorflow • OpenCV

Software/ Programming Languages

Java • Matlab • Scala

Technical Stack

Statistics/Mathematics • Data analysis •
Data visualization • System design

PERSONAL

Agile development • Team player •
Analytic thinker • Strong interpersonal
skills • Entrepreneurship mindset •
Creative thinker • Curious personality

COURSEWORK

GRADUATE

Advanced Machine Learning
Data Science
Open Source Software Engineering
Cloud Computing
Evolutionary Computation

UNDERGRADUATE

Information Retrieval
Object Oriented Programming
Signal Processing

EXPERIENCE

NOKIA BELL LABS | SOFTWARE ENGINEER INTERN

July - Aug 2019 | Antwerpen, BE

- Launched **MLFramework** - A framework based on **Keras** and **Tensorflow** that enables efficient experimentation
- Created a wrapper of the **Keras API**, for **ANN** and **LSTM** networks. Simplified the API, and **reduced code length** around 50% for model creation
- Organized various experiments over models, and created an evolutionary algorithm solution. Introduced a **LSTM** network that achieved **90% prediction accuracy** over several toy datasets

ASELSAN | STUDENT SYSTEMS ENGINEER / CO-OP

Feb 2018 - Mar 2018 | Ankara, TR

- Worked in the Transportation Systems division for a **design project** of electric subways
- Collaborated in the design decisions regarding **system architecture**, both in **hardware** and **software** level

ASELSAN | ENGINEERING INTERN

June 2017 - July 2017 | Ankara, TR

- Implemented a **software model** of an Volkswagen Lupo in **Matlab** for enabling simulation over the route data
- Analyzed **real-life** bus route data from the municipality for testing and **organized** 10+ datasets to be ready for simulation
- Designed a **simulation package** and **GUI** for experimentation over the model using Matlab

PROJECTS

HUMAIN NV | ENTREPRENEURSHIP PROJECT

Oct 2019 - Present | Leuven, BE

Working with **Humain.ai** over the topic of **AI integration** in business.

- Currently creating an AI empowered **diagnostic dashboard** for clients that will enable performance monitoring.

NURUS | BACHELOR CAPSTONE PROJECT

Sep 2017 - Jun 2018 | Ankara, TR

Took part in the development of an **adaptive smart speaker** system in a team of 5 engineers. Responsibilities were :

- Developed an **Android** app for signal processing. **Introduced** an algorithm to keep run-time under 48ms to achieve **real-life** signal processing
- Completed simulations on Matlab for evaluation of the acoustic performance of speakers. Achieved 5-6% **enhancement** in sound reverberation

EXTRACURRICULAR WORK

BILKENT UNIVERSITY | UNDERGRADUATE TEACHING ASSISTANT

Jan 2016 - May 2016 | Ankara, TR

Supervised a group of 8-10 students in the programming exercise sessions in Java and OOP development. Responsibilities were:

- Distribute the assignment.
- Debug faulty student codes.
- Grade the submissions on code functionality and quality.