Ege Ersü

egeersu@gmail.com | egeersu | egeersu

Education

The University of Edinburgh 2020- September 2021 *Edinburgh, UK*
Master of Science in Informatics (Cognitive Science)

Koç University 3.42/4.00 2016-2020 *Istanbul, Turkey*
Bachelor of Science in Computer Engineering

University of Sussex 4.00/4.00 Spring 2020 *Brighton, UK*
Erasmus+ Exchange (Informatics)

Rice University Fall 2018 *Houston, TX*
Global Exchange (Computer Science)

American Robert College of Istanbul 2011-2016 *Istanbul, Turkey*
Science and Math, High School

Skills

Experienced with Python, PyTorch, Julia, JavaScript
Worked with React, SQL, TensorFlow, Java, LISP, C, C++, AWS, GCP, Hadoop
Domain Knowledge Natural Language Processing, Deep Learning
Natural Languages English & Turkish

Work

Koç University Artificial Intelligence Laboratory *Istanbul, Turkey*

Research Assistant | Code | Paper *June 2019 - Aug. 2019*

- Developed an open-source package that transfers pre-trained deep learning models from **PyTorch & TensorFlow** to **Julia**. The software reconstructs each individual layer and connects them as a computational graph which can be modified, re-trained or used for inference.
- The package is mostly used by Julia developers to import popular models for fine-tuning, without having to implement models from scratch. Other researchers at the laboratory use Julia extensively, so it helped the group save time. After the release, I have mentored two other research assistants to maintain the project.

Miletos Co. *Istanbul, Turkey*

Machine Learning Intern *June. 2018 - Jul. 2018*

- Worked with the R&D team to solve the OCR task of converting images of receipts into text. Experimented with various CNN architectures using **PyTorch** and reported performance metrics. Also helped the team with data labelling.

Research

Position-Aware Neural Attentive Graph Networks for Multi-hop Question Answering *The University of Edinburgh*

NLP Research | Code | Paper *2021*

- We open-sourced the first community version of **Entity-RGCN** in **PyTorch** (De Cao et al., 2019) and used it to solve the document-level question answering dataset WikiHop. We have also reduced the entity-graph storage requirement from 1TB to 23GB, enabling the model to run on smaller devices without sacrificing accuracy.

Studying Compositional Generalization in Virtual Environments *The University of Edinburgh*

Dissertation | Code *2021*

- Currently developing an interactive physical browser game that will be used as a virtual environment in Cognitive Science and Reinforcement Learning experiments. It is built as a web application using **React**, allowing researchers to customize the game according their own research agenda without having to modify the source code.