ZEYNEP AKKALYONCU YILMAZ

Master's student working on deep learning for natural language processing at the University of Waterloo

EDUCATION

present – 2018
MMath in Computer Science
University of Waterloo — Waterloo, ON, Canada
GPA: 91.00 / 100.00
Courses: Theory of Deep Learning, Data-Intensive Distributed Computing, Data Infrastructure

2017 – 2013
BS in Computer Engineering
Middle East Technical University — Ankara, Turkey
GPA: 3.37 / 4.00
Ranked in the top 10% of the graduating class

EXPERIENCES

present – 2018
Graduate Research Assistant
University of Waterloo — Waterloo, ON, Canada
- Working on neural text generation models with Prof. Jimmy Lin at the Data Systems Group
- Currently focusing on improving the quality of question generation from free text and knowledge graphs

present – 2018
Graduate Teaching Assistant
University of Waterloo — Waterloo, ON, Canada
- Evaluated the assignments of the course Principles of Data Management and Use
- Managed the discussion forums and course content over the online learning platform UW LEARN

2017 – 2016
Undergraduate Research Intern
KOVAN Research Lab — Ankara, Turkey
- Built a deep reinforcement learning agent that manipulates stacked objects using TensorFlow
- Wrote Python scripts to generate random scenes in Blender to train and test models
- Conducted literature review regarding robotic action planning based on natural language commands

2017 – 2015
Undergraduate Teaching Assistant
Middle East Technical University — Ankara, Turkey
- Collaborated with the instructor in lab preparation and execution for the course Data Structures
- Assisted 100+ students in their programming labs of the course Introduction to C Programming

2015
Software Engineering Intern
ASELSAN Inc. — Ankara, Turkey
- Developed software prototype to track and plot movement of a mobile device in real time
- Implemented C++ library that extracts and displays motion information from built-in sensors
- Explored and benchmarked different signal processing techniques in terms of speed and robustness

SELECTED PROJECTS

2018
Study of Solr on Large-Scale Document Collections
https://github.com/ljj7975/solr-evaluation
- Evaluation of the effectiveness of Solr as a search tool for terms with different selectivity
- Implemented multi-threaded and distributed variations of a sample data analytic workload in Scala with Solr and Spark
- Compared the performance of querying with Solr and filtering over documents with Spark in a Kubernetes cluster

2018
Tardis NMT
https://github.com/achyudhk/Tardis
- Distributed ensemble of seq2seq models with different hyperparameters and data splits in Keras
- Trained and tested the ensemble across a cluster with PySpark using Elephas
- Assessed the ensemble's effectiveness for the neural machine translation task on WMT'14 datasets

2017
Smart Shopping List
http://senior.ceng.metu.edu.tr/2017/thechaincoders/
- Cross-platform mobile Xamarin shopping list application written in C#
- Built a RESTful API with Django around a SQLite database running on an Azure Linux VM
- Created a hybrid recommendation system in Python to make tailored product suggestions
- Implemented a virtual shopping assistant using NLTK featuring speech detection and generation

CONTACT INFO

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SKILLS

Python
C++
C
Scala
Java
SQL
Spark
Hadoop
Kubernetes
Docker

PyTorch
TensorFlow
Keras
NumPy
Matplotlib
NLTK
MATLAB
pandas
Git
Unix
Bash

LANGUAGES

English Turkish French
Russian Finnish

ACTIVITIES

Technovation Mentor
Turkish National Chess Team Player
TED Symphony Orchestra Violinist