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: 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 exams and assignments of the course Principles of Data Management and Use taught by Prof. Tamer Ozsu
• Managed the discussion forums and course content over the online learning platform UWaterloo 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

🎵 ACTIVITIES

Mentor
Technovation 📍 Waterloo, ON, Canada
• Supervising a team of three local middle-school girls during their programming and entrepreneurship journey
• Helping the development of a mobile application that connects music teachers and aspiring students

Professional Chess Player
Turkish National Junior Chess Team 📍 International
• Represented Turkey at numerous national and international tournaments
• Ranked 8th in Europe at The Hopes of the World 4th Open European Festival in Varna, Bulgaria

Violinist
TED Symphony Orchestra 📍 Ankara, Turkey
• Participated in the establishment of Turkey's first and only amateur symphony orchestra (as of 2017)
• Performed in the first violin section at various venues for 4 years

CONTACT INFO

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🌐 zeynepakkalyoncu.me
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in linkedin.com/in/zeynepakkalyoncu

SKILLS

Python
C++
C
Scala
Java

PyTorch
TensorFlow
Keras
NumPy
Matplotlib
NLTK
MATLAB
pandas

SQL
Spark
Hadoop
Solr
Kubernetes
Docker

Git
Unix
Bash

LANGUAGES

English
Turkish
French
Russian
Finnish