ALI SHIBLI

shibli@kth.se +46 072-441 62 95

Stockholm, Sweden https://www.linkedin.com/in/ali-shibli-405a84151/

11 428 https://github.com/alishibli97/

Education

Master's: KTH Royal Institute of Technology, Sweden (2020-2022)

Machine Learning (with research in: natural language processing, computer vision, and deep network interpretability)

Bachelor's: American University of Beirut, Lebanon (2015-2020)

Double Major in Computer and Communications Engineering and Pure Mathematics (Artificial Intelligence track)

Professional Experience

Master thesis student: Ericsson – Sweden (February 2022-June 2022)

Machine Learning Mentor: PECA (Professional Education Content Alliance) Project – Sweden (January 2022)

- Mentored AI, machine learning, and deep learning for over 30 engineers from different companies who were not introduced to AI before
- Prepared personal presentations and python notebooks that cover a wide range of topics in introductory AI

Teaching Assistant: EECS department at KTH – Sweden (August 2021-December 2021)

- **DD2380 Artificial Intelligence course**: gave tutorials and lab sessions on topics of Hidden Markov Models, Reinforcement Learning, and Search in Games.

R&D Machine Learning Engineer: Ericsson HQ– Sweden (June 2021 - August 2021)

- Developed a Question-Answering chatbot system (QA) for Ericsson based on a BERT model and trained on telecommunications data.
- Contributed to developing the internal dataset for Ericsson by labeling question-answering pairs from the text dataset (over 1000 QAs).
- Developed the Ericsson dataset even further by scraping new data from the FAQ platform (around 10,000 QAs).

Research Engineer in Machine Learning: RPL Lab at KTH – Sweden (October 2020 - April 2021)

- Developed model for predicting visual relationships from images, using graph neural network, that achieved state-of-art results in recall and precision.
- Scraped and collected a dataset of 50,000+ images that can be used for visual relationship detection task.
- Developed an open source framework for scraping images with captions from Google, Yahoo, Flickr, and other search engines ***(image_caption_scraper)***

Quality Service and Network Management Engineer: Touch – Lebanon (June 2019 - August 2019)

- Maintained the mobile network over Lebanon by analyzing data received from the network sites.
- Reported fault reports upon capturing interference patterns and jammers in the network.
- Maintained the hardware of the sites.

Projects Accomplished

- Tree-D: autonomous drone that navigates around trees detecting parasites with an accuracy of 85% in real time and shooting them. The model was Yolov3, and transfer learning on 5000 images was applied were all layers of the network were fine-tuned.
- Detect-Me: visual relationship detection model based on graph neural networks to detect relationship triplets *(subject, predicate, object)* in images, in a weakly supervised manner. The dataset was manually collected, to up to 10,000 images with noisy labels, and the model achieved SOT results.
- Tele-Bot: BERT-based question-answering chatbot for the telecommunications field (*at Ericsson*).
- Agricultural-UNet: segmentation model based on UNet model for very noisy agricultural satellite images to detect damages in fields crops. The model which was initially trained for medical imaging, and then fine-tuned to agricultural imaging which multi-label segmentation.
- Spotify Music Recommendation: song recommendation distributed model based on Spotify music meta-data and feature correspondence.
- Lebanese Sports Pitches (LSP app): mobile app to connect sports pitches in Lebanon allowing online booking and reservation.

Achievements & Publications

- *image-caption-scraper* package 2021 ***(image_caption_scraper)***
- Hattrick Award in AI course at KTH 2020
- First place on AUB startup competition 2019 (*award*)
- Second place on Darwazah Lebanese competition 2019 (*award*)
- Semi-finalist on BeryTech Beirut competition 2019

Summary Skills

- Computer vision, natural language processing, data analysis
- Databases, cloud computing, software development, distributed computing (spark mainly)
- PyTorch, Tensorflow, Keras
- Linux, Windows
- Main programming languages: Python, Java, C++

Extra-Curricular Activities

- Sports, football, basketball, working out
- Movies and series

Languages

- English C2
- Arabic C2