DANYANG LIU

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EDUCATION

Shanghai Jiao Tong University Shanghai, China
Master of Science in Cyber Science & Engineering GPA: 3.80/4.0 *Sept. 2017 - Mar. 2020*

Southeast University Nanjing, China
Bachelor of Engineering in Information Engineering GPA: 85.52/100 *Aug. 2013 - June 2017*

TECHNICAL STRENGTHS

Computer Languages Python, Matlab, C++
Frameworks Pytorch, TensorFlow, Sklearn

PROJECTS

Variational Autoencoder for Text Generation Oct. 2018 - Present

- Implemented a transformer-based variational autoencoder for natural text generation and published a paper "A Transformer-Based Variational Autoencoder for Sentence Generation" in 2019 International Joint Conference on Neural Networks (IJCNN 2019).
- Designed a hierarchy architecture for natural language paragraph generation, using conditional variational autoencoder to control the theme of generated text.

Babel Tower Multilingual Translation System Dec. 2017 - Sept. 2018

- Implemented a script to clean the corpus, including tokenization, truecasing and length constraint.
- Designed a style-classification module before translation, which divided the dataset into many subsets and then train sub-models for each set, improving by about 1 BLEU.
- Used transformer as the basic translation architecture.
- For low-resource language pairs, we did some research about semi/unsupervised translation, such like back-translation method.

An Evolving Social Network Model Based on Interest Vectors Jun. 2017 - Dec. 2017

- Proposed an evolving network model where the formation of communities was driven by each nodes various preference of interest fields, denoted as interest vectors, whose mechanism is far different from other models with community structure.
- Implemented an extensible framework for generating evolving graphs.
- Published a paper "Benchmark snapshots for testing social network evolving algorithms" in 2018 International Conference on Identification, Information and Knowledge in the IoT (IIKI 2018).

Identify Android Applications Using Launch Time Traffic Dec. 2016 - Jun. 2017

- Built an Android applications classifier using only the lengths of launch time HTTP traffic, solving the problem of encrypted network traffic. Designed a novel directional cluster of length as the feature. Multiple supervised machine learning algorithms were used to train the classifier, achieving a more than 90% accuracy over 50 popular applications.
- Won the price for the excellent graduation project(5%).

AWARDS

2017 Interdisciplinary Contest In Modeling **Meritorious Winner**

2018 HUAWEI Scholarship