Shangtong Zhang

Resume

Education

Sept.2012– **Bachelor of Science, Computer Science**, *Fudan University*, Shanghai, China, GPA 3.57/4.0, Rank July.2016 9/84.

Thesis: Text matching with LSTM and Earth Mover's Distance, advised by Prof. Wenqiang Zhang

Sept.2016– Master of Science, Computing Science, Statistical Machine Learning, *University of Alberta*, Sept.2018 Edmonton, Canada, GPA 4.0/4.0.

Supervised by Dr. Richard S. Sutton in RLAI lab

Experience

Publications

- 2017 Learning Representations by Stochastic Meta-Gradient Descent in Neural Networks, V Veeriah, S Zhang, RS Sutton, ECML-PKDD 2017, Co-First Authorship.
- 2015 A Deep Neural Network for Modeling Music, Zhang P, Zheng X, Zhang W, Li S, Qian S, He W, Zhang S, Wang Z, ICMR 2015.

Employment

- Sept.2016- University of Alberta, Edmonton, Canada.
 - Present Teaching Assistant for CMPUT229 Computer Organization and Architecture (Sept.2016 Dec.2016)
 - Research Assistant in RLAI lab supervised by Dr. Richard S. Sutton (Jan.2017 Present)
- July.2015- SAP, Shanghai, China, Javascript intern in UI commons of SuccessFactors.
- May.2016 O ConfigUI, a framework to render UI layout with complicate tree-structured metadata
 - DWRExplorer, a chrome plugin to parse DWR request/response into tree structure

Selected Projects

- Feb.2017– Google Summer of Code 2017, Contribute to *MLPack* with frameworks for deep Q-learning and
- Sept.2017 asynchronous deep RL methods (e.g. A3C, async n-step Q-learning etc).
- Sept.2016– **RL: An Introduction**, Implement Sutton & Barto's book Reinforcement Learning: An Introduction Nov.2016 (2nd Edition).

This repository earns more than 1,200 stars and 500 forks in Github

- Jun.2016 **SlardarOS**, Build my own toy OS from the very beginning with C++14 and STL containers..
 - Present Includes virtual memory, interruption, privilege level switch and mutil-processes (in progress)
- May.2016— **Stack Overflow**, Earn more than 1100 reputations in C++ related tags, solve some problems about Present auto-completion with libclang.
- Jan.2015 **MLPack**, Contribute to MLPack, a scalable C++ machine learning library with advanced C++ template Jun.2015 technique.
 - A framework for Mean Shift algorithm which is 3.7 times faster than Scikit does.
 - A detachable framework for various Convolutional Neural Network and implement LeNet1 as a test case.
 - A uniform framework for manifold learning including Isomap, LLE, MDS.
- Feb.2014 Google Summer of Code 2014, Contribute to *Xapian*, a C++ search engine, in optimizing the storage Sept.2014 of *post list* and *position list* by *Vector of Splits Encoding* and *skip list*.

Awards

- Sept.2014 EMC Scholarship, Fudan University.
- Apri.2016 **Second Class Scholarship**, Fudan University.