Yang Li

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EDUCATION

Columbia University New York, NY
M.S. in Computer Science Aug. 2019 – Dec. 2020 (expected)

Shanghai Jiao Tong University (SJTU) Shanghai, CN
B.S. in Computer Science, Major GPA 3.83/4.3 Sept. 2015 – Jun. 2019
Scholarships: 2018 Academic Excellent Scholarship B. 2016, 2017 Academic Excellent Scholarship C.
Awards: 2017 Interdisciplinary Contest in Modeling Meritorious Winner (Top 10% in the world). 2016 Intel IoT Hackathon 4^{th} place.

SKILL

Proficiency in C/C++, Python. Experience in Matlab, Java, SQL, HTML. Solid foundation in data structure and algorithm. Experience in web development and Android application development.

PROJECT

Future Price Prediction [Github], SJTU, Shanghai Apr. 2018 - May. 2019
- Extracted the event information from 5,694,290 online news text by POS tagging and syntax analysis.
- Constructed Event-Embedding model to train and get the text representation using Tensor network.
- Predicted the future price using CNN model implemented by Keras, achieving 55.49% accuracy with 2% increment.
- Paper ***Automatic Learning and Reasoning of Causal Knowledge in the Financial Domain***, is waiting for submission.

Question Answering (QA) system [Github], SJTU, Shanghai Nov. 2018 - Dec. 2018
- Parsed the query in the natural language form to determine the target entities in query by entity linking and POS tagging.
- Designed Storage structure in database to stored the instance-relationship-instance pairs extracted from CN-DBpedia.
- Constructed QA system and implemented search method to get the correct answer from database using SQL.

Machine Learning - Subcellular location predictor [Github], SJTU, Shanghai May. 2018 - Jun. 2018
- Implemented iLocator model to reveal the cancer-related protein mislocalizations with MATLAB.
- Separated protein channel and DNA channel in RGB images based on linear spectral and blind spectral separation.
- Improved the performance of multi-label predictor by using more features and modifying the multi-label classification.

Android App Development, Dating App [Github], SJTU, Shanghai Apr. 2017 - Jun. 2017
- Implemented the function of instant messaging between App users based on Netease-IM.
- Developed the dating location recommendation function using Java according to keywords and user interests.

Android App Development, Werewolf game [Github], SJTU, Shanghai Apr. 2016 - Jun. 2016
- Programmed game functions of voting, players-out logic and module connection mechanism using Java.
- Implemented the communication among App users based on host-client mode through LAN.

Chinese Word Segmentation System [Github], SJTU, Shanghai Nov. 2015 - Dec. 2015
- Programmed Chinese sentences segmentation algorithm based on positive order and reverse order matching.
- Realized automatic classification on Chinese name and general words, word addition and word meaning search functions.
- Constructed system to handle general text on the media by Python and Tkinter, achieving over 93% accuracy.

RESEARCH EXPERIENCE AND PUBLICATION

Cross-Language Translation on Structured Data, Research Assistant (RA), SJTU Jun. 2018 - Nov. 2018
- Proposed and implemented an entity linking model to achieve word sense disambiguation in cross-language translation.
- Constructed Chinese knowledge base with 17 millions instances. The translation accuracy reaches 89.6%, with a gain of 2.8%.
- Paper ***Construction of Chinese Knowledge Graphs via Translation***, is waiting for submission

A Cross-domain & Cross-generation Metric of Unraveling Scholars' Impact, RA, SJTU Apr. 2018 - Nov. 2018
- Constructed Knowledge Net by collecting and analyzing 1 billion citation and time data of paper in 30 academic fields.
- Developed the website front end where the result of paper is shown by HTML, CSS, Javascript.
- Submitted ***Turing Index: A Cross-domain & Cross-generation Metric of Unraveling Scholars' Impact***, to PLOS ONE.

Computer Vision: Automatic Artworks Harmonization, RA, SJTU Apr. 2018 - Sept. 2018
- Designed and implemented the positioning algorithm using VGG network and the similarity matrix.
- Proposed and implemented two-stage procedure to merge images and unified the image style automatically.
- Submitted a paper on ***Art Recreation: Automatic Artworks Harmonization*** to WACV 2019.