

WENYAN LI

lyan62.github.io | (240)-413-5522 | wenyanyi@umd.edu

EDUCATION

University of Maryland, College Park, MD

M.S. Electrical Engineering

August 2018

- Relevant Coursework: Machine Learning, Computational Linguistics, Computer Processing of Pictorial Information, Database Design, Convex Optimization

Northwestern Polytechnical University, Xi'an, China

B.S. Electrical Engineering and Automation

June 2016

SKILLS

Programming Languages: Python, C/C++, MATLAB, PostgreSQL, Java (Basic), Visual Basic

Frameworks and Tools: PyTorch, Keras, Tensorflow (Basic), Django, PySpark, ROS, LaTeX, SPSS, Git

RESEARCH EXPERIENCE

Master's Thesis Research: Deep Learning for Verb Prediction

August 2017 – Present

Computational Linguistics and Information Processing Lab, University of Maryland, College Park

Advisor: Jordan Boyd-Graber

- Processed news corpora of more than 6 million sentences in German and Japanese and developed a self-attentive neural model for incremental verb prediction and simultaneous translation latency reduction

Prediction of Genetic Interactions using Deep Neural Networks

September 2017 – Present

University of Maryland, College Park

Instructor: Max Leiserson

- Performed sequential data analysis on 5.4 million pairwise genes and achieved state-of-art accuracy on phenotype prediction with innovative feature extraction and sequence modelling with deep neural networks

RELEVANT PROJECTS

Dependency Parsing for English

November 2017 – December 2017

- Implemented both graph-based and transition-based dependency parsing for English
- Predicted parsing actions based on multiple configuration features with averaged perceptron algorithm

Face and Handwritten Digits Recognition

February 2017 – May 2017

- Used Naïve Bayes, K-NN rule, SVM and CNN for face and handwritten digits recognition
- Applied PCA and LDA for dimensionality reduction and accuracy improvement

Structure from Motion

April 2017 – May 2017

- Succeeded in 3D scene reconstruction with a series of 2D images by applying triangulation and RANSAC
- Obtained the camera pose with respect to the scene

Face Swap in Pictures and Videos

March 2017 – April 2017

- Employed DLib for face recognition and implemented face warping with triangulation and Thin Plate Spline
- Improved face swap results with cross dissolve and Poisson blending

Web Development with Python Django

September 2016 – October 2016

- Created an end-to-end web application that has a web frontend and a database backend using PostgreSQL
- Integrated course management, homework assignments/quizzes handling and grading in the application

INTERN EXPERIENCE

Bosch Rexroth, Xi'an, China

July 2015 – August 2015

- Conducted PCBA testing and process failure mode effects analysis (PFMEA) in the Department of Technical Functions (TEF)

PUBLICATIONS

S. Wang, M. Hu, H. Shi, S. Zhang, X. Li and W. Li, "Humanoid robot's omnidirectional walking," 2015 IEEE International Conference on Information and Automation, Lijiang, 2015, pp. 381-385.

X. Li, H. Shi, X. Chen, W. Li and S. Wang, "Research on collaborative allocation of the multi-agent based on equivalent time," 2015 International Conference on Orange Technologies (ICOT), Hong Kong, 2015, pp. 109-112.