

Background

Machine learning and deep learning

Education

- May. 2022 (expected) **Ph.D. student in Computer Science**, *Virginia Tech*, Blacksburg, VA.
Focus: Deep Learning, Machine Learning, Computer Security
Advisor: Dr. Bimal Viswanath
- Jun. 2017 **B.E. in Computer Science and Technology**, *Wuhan University*, Wuhan, China.
Major GPA 85.72/100

Work Experience

- Aug. 2017 **Graduate Research Assistant**, *Network Dynamics and Simulation Science Lab, Virginia Tech*
- Aug. 2018 **Advisors: Dr. Anil Vullikanti, Dr. Samarth Swarup**
- Conducted research project in crossing domain of Deep Learning and Network Simulations
- Aug. 2016 **Data Scientist Intern**, *IBM China Development Labs, Lab Based Service*, Wuhan, China
- Nov. 2016
- Participated in knowledge graph project and maintained weekly data mining workshops
 - Survival analysis model-based evaluation and prediction for business scenarios
- Aug. 2015 **Research Assistant**, *State Key Laboratory of Software Engineer – Wuhan University*, China
- Aug. 2016 **Advisor: Dr. Bo Du**
- Proposed a new robust Multiview Clustering algorithm based on matrix approximation

Technical Skills

- Languages Proficient in Python, Java, Matlab; familiar with C++, C
- Models CNNs, LSTMs, RNNs, Autoencoder, GAN, Clustering, Classification & Regression models
- Libraries&Tools Tensorflow, Keras, Scikit-learn, Numpy, Pandas, Scipy, PyTorch
Familiar with Eclipse, Git, Tableau, R, Processing, Seaborn, Ggplot2, NetworkX, NLTK, WEKA
- Certificates Neural Networks and Deep Learning; Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization; Structuring Machine Learning Projects by **deeplearning.ai**
- Courses Convolutional Neural Networks (Computer Vision), Sequential Models by **deeplearning.ai**

Selected Projects

- Deep Diffusion Prediction**, built deep neural network(Auto-encoder) to learn and predict spreading path of diseases on large networks, explored how much Auto-encoder can learn and mutual-information relationships between neural network layers.
- Poem generator based Recurrent Neural Network**, collected and preprocessed poems by Gibran; built LSTM-based RNN with Keras to generate styled poems.
- Collaborative Filtering-based Film Recommender System**, implemented a simplified movie recommender system based on collaborative filtering learning algorithm.
- Memory Management System**, implemented a memory management system with a hashtable and memory pool using quadratic probing and buddy method.

Publication

- 2016 **Jiameng Pu**, Qian Zhang, Lefei Zhang, Bo Du, Multiview Clustering Based on Robust and Regularized Matrix Approximation, Accepted, **2016 International Conference on Pattern Recognition (ICPR 2016)**.