
Research Interests

Data-driven security, machine learning

Education

- May. 2022 (expected) **Ph.D. student in Computer Science**, *Virginia Tech*, Blacksburg, VA.
Focus: Security and machine learning
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 on the application of deep learning to predict spread of diseases based on social networks
- 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
 - Conducted survival analysis model-based evaluation and prediction for business scenarios
- Aug. 2015 **Research Assistant**, *State Key Laboratory of Software Engineering – 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, GANs, Clustering, Classification & Regression models
- Libraries & Tensorflow, Keras, Scikit-learn, Numpy, Pandas, Scipy, PyTorch
- Tools 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, Sequential Models by **deeplearning.ai**

Selected Projects

Deep Diffusion Prediction: Developed a deep neural network model (Auto-encoder) to learn and predict spreading path of diseases on large networks. Also developed techniques to understand the predictions made by the model.

Recurrent Neural Network-based Poem Generator: Designed LSTM-based RNN with Keras to generate poems while preserving authorship style.

Collaborative Filtering-based Movie Recommender System: Implemented a movie recommender system based on collaborative filtering learning algorithms.

Publication

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