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EDUCATION

Shanghai Jiao Tong University (SJTU)

Shanghai, China

B.E. in Cyber Security (Information Security Department in SEIEE);

Sept. 2015 - June. 2019 (Expected)

Email: wangjksjtu_01@sjtu.edu.cn

o **GPA**: 3.96/4.3 (91.4/100)

• **Rank**: Major: 2/98; Overall: 2/98

PUBLICATIONS

• Multiple Character Embeddings for Chinese Word Segmentation.

May.2018

Submitted to EMNLP 2018: 56th Annual Meeting of the Association for Computational Linguistics. (First author)

• One Bit Matters: Understanding Adversarial Examples as the Abuse of Data Redundancies. May. 2018
Submitted to NIPS 2018: Annual Conference on Neural Information Processing Systems.

• The Helmholtz Method: Using Perceptual Compression to Reduce ML Complexity.

Submitted to ACMMM 2018: ACM Multimedia Conference for 2018.

(Second author)

• Data Mining and Password Generation Based on Large-Scale Real Plain Passwords. Feb. 2018
Submitted to Journal of Computer Research and Development (Chinese, EI). (First author)

• LiDAR-Video Driving Dataset: Learning Driving Policies Effectively.

Accepted by CVPR 2018: IEEE Conference on Computer Vision and Pattern Recognition.

(Co-First author)

• Overview of Plaintext Password Generation Models.

**Accepted by Chinese Computer Engineering and Applications Journal. (Chinese)*

(Second author)*

AWARDS

• National Scholarships (top 2%)	2016, 2017
• SJTU Outstanding Scholarships Level-A (top 1%)	2016, 2017
• Meritorious Winner Prize of Mathematical Contest in Modeling (MCM)	2018
• Second Prize in National College Students Information Security Competition (NCSISC)	2017
• Second Prize in The Chinese Mathematics Competitions (CMC)	2017
• Third Prize in Parts of The National Physics Contest for College Students	2016
• SJTU Merit Students	2016, 2017
• SJTU Excellent League Cadres	2016, 2017

RESEARCH EXPERIENCES

SJTU Machine Vision and Intelligence Group (MVIG)

CS, Shanghai

Advised by Research Professor Cewu Lu

Apr. 2017 - Present

- 3D Object Detection PointNet/PointCNN: Design a novel end-to-end network which generates bounding boxes wiser than VoxelNet by combining farthest sampling, segmentation PointCNNs and RPN network.
- LiDAR-Video Benchmark for Auto-driving: Build a benchmark designed for policy learning which has combined 3D and 2D information scanned by high-precision sensors. Answer the questions why the depth information matters and how to leverage depth effectively.

SJTU PRP Program: Data Mining and Analysis of Plain Passwords

IS, Shanghai

Advised by Associate Professor Gongshen Liu. Project evaluation: Excellent (Top 10%) Jan 2017 - Oct 2017

- Data Mining on Large-Scale Real Plain Password: Analyse the implicit rules for users when creating passwords in real scenarios based on two hundred million leaked real passwords.
- Password Generation Model: Survey and reproduce the representative models. Firstly apply GAN to password generating scenario, which outperforms other the state-of-the-art models such as OMEN (Markov in essence), PCFGs and pure-LSTM/GRU.

Dynamic Searchable Encryption System Based on Graph Database

IS. Shanghai

Advised by Associate Professor Lei Fan. Honor: National second prize in NCSISC Mar. 2017 - Aug. 2017

- Algorithm Improvement on Parallel Dynamic Searchable Symmetric Encryption: Simplify and improve the original algorithm proposed by Seny Kamara and also propose several additional policies to enhance security.
- The Back-end Implementation Based on The Graph Database: Implement our improved algorithm utilizing Neo4j Graph Database and successfully validate it based on large-scale ciphers.

Skills & Projects

- Programming Language: Python, Java, C++, Matlab
- Deep Learning Framework: Tensorflow, Pytorch, Keras, Dynet
- Computer Vision: OpenCV, PCL, CloudCompare, MeshLab
- Projects: JKSniffer (network sniffer), SuperAlarm (android app), DSSE-GraphDB (Work for National Competition)