

# Xiangyang Shi

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## ○ EDUCATION

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**University of Southern California (USC)**, California, America Aug. 2017 – Jun. 2019

- M.S. in Computer Science

**Shanghai Jiao Tong University (SJTU)**, Shanghai, China Sept. 2013 – Jun. 2017

- B.S. in Information Security
- SJTU 2nd class Scholarship • Arowana Scholarship • Guanghua Scholarship
- Certified Professional C++ Programmer by China Computer Foundation

**Georgia Tech Atlanta Summer Program**, Georgia, America Jun. 2016 – Aug. 2016

## ○ INTERNSHIP

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**SciKnowEngine Group** in **Information Sciences Institute** Sept. 2017 – Sept. 2018

- Built a pipeline to extract Western blots information in biomedical articles
- Proposed a layout-aware YOLO network to decompose subfigures from papers
- Adjusted ISI OCR to restore structural experiment results from Western blots charts

**DiSPARITY Group** in **Information Sciences Institute** Oct. 2017 – May. 2018

- Built a pipeline to practice GPS falsify detection for street view images
- Filtered GPS images using Random Forest classifier on Scene Recognizer
- Used SIFT feature for perspective transformation and feature-shared CNN to evaluate similarity to Google Street View

**Risk Assurance Dept.** in **PwC Ltd. (Shanghai)** Jul. 2016 – Sept. 2016

- Participated in the penetration test of intranet for METLIFE-CN and Mizuho Bank
- Revised and deployed the Mugsy & ElasticSearch distributed OS log system

## ○ RESEARCH EXPERIENCES

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**Dangerous Goods Detection based on CNN** Dec. 2016 – May. 2017

- Collected and regenerated millions of X-ray baggages images with knives, guns or other threats
- Used Caffe with modified GoogLeNet to train a classifier
- Constructed a system to assist security check in Shanghai Metro

**Meta-Path based Similarity Analysis for acemap.info** Sept. 2015 – Sept. 2016

- Analyzed similarity between scholars, institutions and journals with heterogeneous network model
- Using Gephi to visualized academic relationship in the field of CS based on our analysis
- Developed a website (more than 100,000 weekly visits) to display our conclusion

**Construction of Security System for acemap.info** Jun. 2016 – Dec. 2016

- Used Burp Suite to scan and fix vulnerabilities in our website
- Built a Web Application Firewall via ModSecurity

## ○ PUBLICATION

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- G.Burns, X.Shi, Y.Wu, H.Cao and P.Natarajan. “Towards Evidence Extraction: Analysis of Scientific Figures from Studies of Molecular Interactions” in SemSci 2018, ISWC, Monterey, California, 2018

## ○ SKILLS

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**Programming language:** Python, C#, MATLAB, Julia

**Tools:** Tensorflow, Keras, L<sup>A</sup>T<sub>E</sub>X, Kali-Linux, MySQL, Gephi