

Jialin Xu

☎ (412) 609-2729

✉ jialinx@andrew.cmu.edu

🌐 <http://curryx.github.io>

Information Networking Institute | Carnegie Mellon University

Education

- 2016-2018 **Carnegie Mellon University**, *Master of Science in Computer and Information System*, Pittsburgh.
2016-2018 **University of Hyogo**, *Master of Applied Informatics*, Kobe.
2011-2015 **Beijing University of Posts and Telecommunications**, *Bachelor of Engineering*, Beijing.

Intern

- Aug.2016 **Security Audit Intern**, RAKUTEN, Tokyo, Japan.
◦ Accomplished penetration live tests on Rakuten's "Food Avenue" project.
◦ Conducted live tests aimed at the OWASP top 10 web vulnerabilities.
◦ Applied daily security auditing on Rakuten's websites.
- Apr.2015- **Software Engineer Intern**, ROCKCHIPS ELECTRONICS CO., LTD, Beijing, China.
Feb.2016 ◦ Developed a module application for recording selling report, customers' information on iOS device.
◦ Built a parser model based on RapidXml library to read pre-defined format data.
◦ Comprehensively conducted data analysis on customers' preference survey results using R.
- Sep.2014- **Research Intern**, UNIVERSITY OF HYOGO, Kobe, Japan.
Dec.2014 ◦ Created a model to analyze Data Breach Incidents via R from longitudinal, geographical angle.
◦ Conducted simulation of privacy negotiation process and optimized the strategy to achieve agreements.
◦ Reclassified Android threat and proposed mitigation strategies.
- Jun.2013- **Research Intern**, TSINGHUA UNIVERSITY, Beijing, China.
Sep.2014 ◦ Enhanced dynamic detection algorithm focusing on pedestrians and automobiles.
◦ Achieved the basic automatic recognition of lane, guide board and pedestrian.
◦ Developed a rudimentary model based on TI Davinci DM6467 to recognize lane and guide board.

Project

- May.2017- **Analysis on similarity structure pattern**, MACHINE LEARNING.
Present ◦ Performed statistical analysis on datasets from Rakuten and National Police Agency.
◦ Extracted similar structural pattern from sugar chain that may cause particular diseases.
◦ Applied tree kernel k-means algorithm to classify the DOM trees of phishing site pages.
- Mar.2017- **High-performance Multi-tier Twitter Analytics Web Service**, CLOUD COMPUTING.
May.2017 ◦ Deployed high performance, fault-tolerant web service on AWS, implemented RESTful API structure to query data from 1TB raw tweets by MapReduce.
◦ Implemented data schema in MySQL and HBase, optimized database to serve different hybrid requests.
◦ Enhanced live performance by frontend caching, data replication and employing load balancers.
- Mar.2017- **Ethical Hacking Windows OS using Command Line**, PENETRATION HACK.
Apr.2017 ◦ Accomplished reverse attack using Metasploit framework.
◦ Conducted ethical keyboard, webcam and file management hacking on Windows 7 and Windows 10.
◦ Achieved UAC bypassing taking advantage of Powershell Empire and obtain the hashed password value.
- Mar.2017- **Online Code Compiler based on Docker Container and AWS**, CLOUD COMPUTING.
Apr.2017 ◦ Constructed compiler images for Docker to build containers and servers to serve requests.
◦ Built proxy server using Python Flask, which forwards requests to Docker container and return to users.
◦ Utilized AWS EC2 Container Service on container pool and load balancer to ensure high performance.

Skills

- Programming Python, Java, HTML/CSS, R, LabVIEW, \LaTeX
Tools Git, Maven, Kinect, IntelliJ IDEA, PyCharm, MySQL, Hadoop, AWS
Languages English, Chinese, Japanese
Coursework Cloud Computing, Machine Learning, Web Application Development, Computer Networks, Applied Informatics, Data Structure, Interactive Web Design