

Xiao Yi

83 Glenville Ave
Allston, MA 02134
617-800-3986
yixiao28@bu.edu

EDUCATION

M.S. Computer Science w. Specialization in Data-Centric Computing, Boston University, Boston MA, January 2019.

B.E. Software Engineering, Xi'an Jiaotong University, Xi'an China, June 2017.

PUBLICATION

Z. Jia, C. Shen, X. Yi, Y. Chen, T. Yu and X. Guan, Big-Data Analysis of Multi-Source Logs for Anomaly Detection on Network-based System, CASE 2017, Xi'an China, August 2017.

C. Shen, Y. Li, T. Yu, S. Yuan, X. Yi and X. Guan, Motion-Sensor Behavior Analysis for Continuous Authentication on Smartphones, WCICA 2016, Guilin China, June 2016.

WORKING PAPER

N. Kostyuk, X. Yi, The Effect of the Internet of Contentious Politics in Authoritarian Regimes.

RESEARCH

Research Assistant, Harvard John A. Paulson School of Engineering and Applied Sciences, Cambridge MA June 2018 - Present

Advisor: Prof. Boris Kozinsky

- **Fooga (Functional Object-Oriented Graph Automation) Platform**

- ❖ Data science automated infrastructure and analysis of large computed data;
- ❖ Applying Neo4j Graph Database and analyzing query performance over a million nodes comparing with Postgres;
- ❖ Using block-chain technique for data verification.

Research Assistant, University of Michigan Ann Arbor Gerald R. Ford School of Public Policy, Ann Arbor, MI October 2017 - Present

Advisor: Nadiya Kostyuk

- **The Effect of the Internet of Contentious Politics in Authoritarian Regimes**

- ❖ Analyzing the effect of the spread of the internet on contentious politics in authoritarian regimes;
- ❖ Conducting a meta-analysis across hundreds of sub-national datasets from xSub and using estimates of internet penetration from 1982 to 2018.

Research Assistant, XJTU MOE Key Lab for Intelligent Networks and Network Security, Xi'an China January 2015 - January 2017
 Advisor: Prof. Chao Shen, Prof. Tao Qin and Prof. Xiaohong Guan

- **DNS Software Passive Fingerprint Identification**

- ❖ Analyzed BIND, Unbound and Windows Server's DNS resolution behavior and set up fingerprints;
- ❖ Applied machine learning algorithms to identify the fingerprints of these software.

- **Big-Data Analysis of Multi-Source Logs for Anomaly Detection on Network-based System**

- ❖ Applied Hadoop and Spark for large data storage and computation and ElasticSearch for fast data query;
- ❖ Applied machine learning algorithms to detect abnormality threats based on Linux system logs.

- **Motion-Sensor Behavior Analysis for Continuous Authentication on Smartphones**

- ❖ Analyzed smartphone users' authentication features based on smartphone's sensors;
- ❖ Applied machine learning algorithms to improve identification rate to 88.95%.

PROJECT

Team Leader and Server-end Developer, Link Studio, Xi'an China November 2016

- **Present**

- ❖ Led team to develop XJTU-Link, a digital campus information system on both Android and iOS, which fulfill almost all the daily requirements in campus;
- ❖ Designed, developed and maintained the database and server-end;
- ❖ Adopted by XJTU Information and Data Center, with 10000+ users and 2000+ daily hits.

SKILL

Python, Java, C/C++, Matlab; MySQL, Neo4j, Hadoop, Spark; Machine Learning.