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Summary

Specialities: data-driven analysis, probability and statistics, and DevOps.

EDUCATION

University of Illinois at Urbana-Champaign (UIUC), IL

2016 - Dec 2018

Masters in Library and Information Science · School of Information Sciences (iSchool)

Foreign Trade University, Hanoi, Vietnam

2011 - 2015

Bachelor of Business Administration (BBA)

TECHNICAL SKILLS

- Programming languages: Python, Bash shell, R, SPSS
- Data analysis: MySQL, UNIX command line utilities, Weka
- Editor: Emacs (spacemacs + evil mode), vim

Honors and Awards

- USENIX Enigma Diversity Grant Award (2018)
- Dorothy C. McAlister Endowment Travel Support (2018)

Work Experience

Technical Programmer Intern, Oath (formerly Yahoo!), Champaign, IL

Summer 2018

Implemented monitoring tools (OpenBMP) for measuring and securing Border Gateway Protocal (BGP) interdata-center network traffic.

Measured IPv6 Adoption Rate using traffics from Oath Content Distribution Network (CDN) to understand, plan, and optimize Oath Network.

- Implemented Open BGP Monitoring Protocol (OpenBMP) to track million Routing Information Base dumps and Update dumps for BGP. [Apache Kafka, Zookeeper, Apache Tomcat, MySQL MariaDB]
- Calculated Total Served Bytes, Total Requests, Total Connections, and Total IP addresses from terabytes of data. [Apache Pig]
- Measured IPv6 adoption rate by dividing total number of IPv6 addresses to total number of IP addresses. [Panda Python library]
- Visualized global IPv6 adoption rate via choropleth map. [Folium Python Library].

Security Engineer Intern, National Center for Supercomputing Applications (NCSA) Summer 2017 Built a distributed log platform to propagate attack data to participating sites in real time.

- Automated deployment of an SSH key logger honeypot in 3 participating sites across U.S. [Python, Ansible playbook].
- Distributed security logs using pub-sub and gossip-based peer-to-peer messaging [ZeroMQ].
- Built an ETL data streaming to measure million entries of network and host authentication logs [Apache Kafka].
- Analyzed top 100 frequent SSH clients used to brute-force attack IoT devices [clickhouse].

Assessment Research Practicum, Illinois Leadership Center (ILC), UIUC

2017

Conducted assessment reports and library reports.

- Analyzed evaluation data from 4 ILC programs [SPSS].
- Conducted monthly query reports of ILC Library usages [Koha Library Software, MySQL].
- Led 'Book of the Month' event at ILC and organized 'Faculty Book Club'.

IT Help Desk, Instructional Tech & Design, iSchool, UIUC

2016 - 2018

Implemented card reader for checkout equipment process

- Designed and integrated new Equipment database with existing database.
- Built a checkout interface for 10 users, serving hundreds of students, faculty, and staff within iSchool.
- Produced technical documents for faculty staffs on Cloud Computing & Storage, UNIX, and MySQL.
- Supported remote or in-person students and staffs for technical issues during online sessions.
- Guided guest speakers and students using the Blackboard Collaborate Ultra tool.

Courses

Data Mining

Data, Statistical Models and Information

Computer Security

Communication Networks

Introduction to Databases