Tyler O'Meara

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EDUCATION

STANFORD UNIVERSITY
MS in Computer Science
September 2019 - Present
Primary Depth in Systems
Cumulative GPA: 4.12

THE UNIVERSITY OF TEXAS AT AUSTIN
BS in Computer Science
December 2016 | Austin, TX
Turing Scholars Honors Program
Cumulative GPA: 3.90

SKILLS

COMPUTER SCIENCE
Distributed Systems
System Design
Concurrent Programming
Internet Networking
Infrastructure Security

PROGRAMMING LANGUAGES
C++ (Proficient)
Go (Proficient)
Python (Familiar)
C (Familiar)

LINKS

Github:// **Acidity**
LinkedIn:// **tyleromeara**

COURSEWORK

STANFORD
Advanced Topics in Operating Systems
Data Management and Data Systems
Introduction to Cryptography
Principles of Data-Intensive Systems
Computer Systems Architecture
Performance Engineering of Computer Systems and Networks
Technology for Financial Systems

TEXAS
Advanced Operating Systems
Algorithms and Complexity Honors
Computer Architecture Honors
Computer Security
Computer Systems (OS) Honors
Distributed Computing Honors
Network Security

EXPERIENCE

GOOGLE | Software Engineer
January 2018 - Present | Search Infrastructure | Mountain View, CA

- Worked on the core Search Infrastructure team, which ran search for Google Websearch, YouTube, Google Apps (Drive, Gmail, etc.) and more
- Helped redesign the configuration mechanism in order to greatly simplify the system and decrease time to live while maintaining reliability
- Implemented core components of the new config system, including the standard client library
- Worked with relevant stakeholders such as SRE to drive policy improvements
- Led efforts ensuring that testing setups worked well with the new config system

QUORA | Software Engineer
January 2017 - January 2018 | Infrastructure Security | Mountain View, CA

- Led Infrastructure Security projects on the Infrastructure team
- Designed, implemented, and rolled out new extensible SSH infrastructure to all developers with minimal interruption to existing workflows
- Leveraged the new SSH infra to require two factor authentication (2FA), central key management, and improved auditability for all SSH connections
- Developed a long term plan for the ingestion, processing, and analysis of security logs in collaboration with the Data Platform team
- Led infrastructure modernization efforts by pioneering the use of new industry standard technologies such as Docker containers and autohealing infrastructure
- Coordinated with several engineers to enact process improvements for documentation, response, and long term resolution of infrastructure incidents and to improve team efficiency
- Reviewed and provided feedback on proposals for new technical systems from multiple engineering organizations, ensuring the security and reliability of newly built systems

DROPBOX | Software Engineering Intern
May 2016 - August 2016 | Infrastructure Security | San Francisco, CA

- Worked on **Grouper** as a member of the Infrastructure Security Team
- Added ability for users to tag SSH keys, restricting their access to a subset of the user's permissions
- Designed and implemented support for service accounts in order to facilitate automated access to Grouper protected resources
- Designed an extensible interface for the management of secrets in secret distribution systems, leveraging Grouper's access control support to protect changes
- Integrated Dropbox's proprietary secret distribution system with Grouper's interface to improve common secret management workflows

PUBLICATIONS

[1] Oliver Jensen, Tyler O'Meara, and Mohamed Gouda. "Securing NFC Credit Card Payments against Malicious Retailers". In: *The International Conference on Networked Systems* (2016).

[2] Tyler O'Meara. *Securing DNSSEC Against State Level Adversaries*. Undergraduate Honors Thesis. Department of Computer Science, The University of Texas at Austin, 2016.