

Violet Vysotsky

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SKILLS

LANGUAGES

Proficient
Rust • Java • C/C++ • Python 2+3
Familiar
Shell • \LaTeX • SQL • Typescript

TECHNOLOGIES

Git • Mercurial • TCP
BPF • GraphQL • Node.js

EDUCATION

UCLA

MS IN COMPUTER SCIENCE
Graduated June 2019 | Los Angeles

UCLA

BS IN COMPUTER SCIENCE
Graduated June 2017 | Los Angeles

COURSEWORK

COURSERA

Accessibility and Inclusive Design

GRADUATE

Capstone: NDN Interest Signing

Topics in Internet Research
Network Algorithmics
Cryptography
Type Theory

UNDERGRADUATE

Operating Systems
Compiler Development
Networking
Microservices
Programming Languages
Cryptography

EXTRACURRICULARS

LUG EVP

Hosting Installfests
Hosting Buildfests
Organizing company events

ACM NETSEC EVP

Hosting Security track
Hosting UCLA CTF 2017
Designing CTF Problems

WORK EXPERIENCE

CAREER BREAK | HOME

- Family obligations, estate management, health following a family loss
- Skill development - Ansible, server management, accessible authorship

SECURITY DEVELOPER | 1PASSWORD

Mar 2022 - Jul 2023

- Designed or implemented Mac/Windows security features concerning encryption flow, SSO, key management, code signing
- Resolved vulnerabilities on Mac/Windows/Linux
- Performed regular security code reviews on networking, cryptography, logging
- Contributed non-security improvements for browser IPC, Rust compile times
- Skills: Application Security, Secure Code Review, Rust, Typescript

TRANSPORT SECURITY | GOOGLE

Aug 2019 - Feb 2022 | Sunnyvale, CA

- Designed and rolled out post-quantum key agreement to critical customers
- Added RPC features; custom certificate test hooks, AES FIPS validation
- Improved monitoring of RPC handshake performance and security signals
- Guided an intern project improving gRPC cryptographic efficiency
- Skills: Protocol Migration, Authentication, Java, C++, Mentorship

INTERNSHIPS

AUTOMATED MALWARE TOOLS | FACEBOOK

Jun 2018 - Sep 2018 | Menlo Park, CA

- Ensured consistency in Facebook's ThreatExchange malware database
- Created a workflow for data privacy guarantees in malware analysis pipeline
- Skills: Database Consistency, ThreatExchange, Hack, GraphQL, SQL

KERNEL NETWORKING | FACEBOOK

Jun 2017 - Sep 2017 | Menlo Park, CA

- Created TCP option to provide out-of-band signaling using get/setsockopt API
- Added support for the option to a transparent cryptographic network layer
- Skills: Linux Kernel, TCP, BPF, Transparent TLS, C

SECURITY PRODUCTION ENGINEERING | FACEBOOK

Jun 2016 - Sep 2016 | Menlo Park, CA

- Automated tracking of server/job provisioning artifacts
- Detected and removed of >50% of defunct provisioning artifacts
- Skills: Kerberos CLI, Python

INSTRUCTION

MATHEMATICS FOR LIFE SCIENCES | TEACHING ASSISTANT

Apr 2018 - Jun 2019 | University of California, Los Angeles

- Wrote weekly demo-focused presentations for two 20 person Sagemath labs
- Assisted students in mastering primary course material in lab and TA sessions

UCLA CTF | CYBERSECURITY COMPETITION

May 2017 | Los Angeles, CA

- Designed and deployed problem sets • Mentored teams • Technical support