

Kelly Kaoudis

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Employment

Twitter - Boulder, CO

Sr Software Engineer, Application Security (software engineering) 08/2019 - present

- Building & maintaining Scala, JS, Python libraries & services to protect Twitter's application layer.
- Security-focused code and application review across Twitter.
- Part of volunteer "shepherds" team of architecture reviewers for technical design documents across Twitter.
- Researching/writing proposals for new appsec-related work opportunities for appsec & other teams.
- Part of instructor rotation for internal threat modeling and security awareness classes.
- Onboarding new colleagues; mentoring junior colleagues during their transition to mid-level & onward.
- Part of rotation for response to and coordination of Vulnerability Disclosure Program reports and payouts.

Software Engineer II, Developer & Enterprise Solutions 01/2017 - 08/2019

- Designed & built cross-team integration enabling response to a queue of ~80,000 unactioned "high risk" external developer Twitter data access applications collected over two years.
- Refactored/redesigned tech-debt-burdened IAM service following Domain Driven Design, simplifying dev process and shortening time-to-prod for new features.
- Mentor/buddy for graduate intern during their summer internship.
- Designed & built financial reporting service enabling Twitter to recognize revenue & calculate taxes for developer.twitter.com sales.
- Helped design & build subscription billing & invoicing for developer.twitter.com.
- Part of paging on-call rotation.

Software Engineer I, Quality Engineering 02/2016 - 01/2017

- Release coordination across teams within Developer & Enterprise Solutions org, embedded with feature teams to test & ensure feature quality, supported cross-team staging environment and always-on staging test clients.

University of Colorado - Boulder

Research Assistant, Networking & Security Research Group 08/2015 - 12/2015
Teaching Assistant, Software Development Methods & Tools (CSCI 3308) 01/2015 - 05/2015
System Administrator, Tufo Lab 01/2014 - 05/2014
Graduate Teaching Assistant, Principles of Programming Languages (CSCI 3155) 08/2013 - 12/2013

Intel - Longmont, CO

Graduate Software Engineering Intern, SSD Linux Device Drivers 05/2015 - 08/2015

Sandia National Laboratories - Albuquerque, NM

Graduate Software Engineering Intern, Center for Cyber Defenders 05/2014 - 12/2014

ARM - San Jose, CA

Software Engineering Intern, Graphics and Media Processing 05/2013 - 08/2013

Education

University of Colorado - Boulder

M.S., Computer Science graduated 2015
B.S. & B.A., Journalism, Computer Science, French graduated 2013

Technologies and languages

Scala, Java, Python, Javascript (ES6, React), HTML, Ruby, C, shell scripting, *nix, JVM, Maven, MySQL, AWS, Jenkins, Chef, Burp, Wireshark, Make, gdb, IDA, Docker

Publications

- **CVE-2021-29922** bit.ly/3CCq244, **CVE-2021-29923** bit.ly/3xC6HMs, **CVE-2021-29921** bit.ly/2VK4Mbk, **CVE-2021-29662** bit.ly/3mIVndP, **CVE-2021-28918** bit.ly/3dfeBo8
- **Rotten code, aging standards, & pwning IPv4 parsing**; Kelly Kaoudis, Sick Codes. DEF CON 29 bit.ly/2U88n2B
- **Application Security at Scale**. Datadog Bits of Security 2021 bit.ly/3dYwDu5
- **Scaling Validation and Quality of Streaming Data Products at Twitter**. Strange Loop 2017 bit.ly/2CiLm1T
- **Augmenting Cloud Architectures to Support Decentralized Applications**; M. Coughlin, K. Kaoudis, E. Keller. IEEE Integrated Management 2017 bit.ly/2lihaKO