# **APRIL KING**

https://grayduck.mn april@grayduck.mn

github.com/april macaw.social/@april

Saint Paul, MN, 55104

#### PROFILE

Staff security engineer who is passionate about making the internet a safer place. Strong experience in application, web and email security, TLS/PKI, key and secrets management, and authentication systems.

#### **EXPERIENCE**

### Staff Security Engineer, Dropbox — 2021-2024

- Rebuilt and led the Application Security team, revamping hiring process and realigning roles and responsibilities across the security organization
- Led company-wide effort across desktop, mobile, and SDK systems to revamp a decade-old certificate pinning system, averting a \$65M outage
- Created new intake system for security organization, dramatically simplify a previously ad-hoc engagement system and greatly improving the business's engagement with the security org
- Authored over a dozen security policies and standards, across web, email, source control, and DNS, as well as writing the corporate secure coding standards, the SDLC, and annual security training
- Cryptographic expert for Boxcryptor acquisition, and co-designer of Dropbox's replacement for its 15-year-old cryptographic storage system
- Ran effort to improve Dropbox's email security across itself and subsidiaries, cutting observed spam rates by over half
- Primary security contact for the Dropbox legal organization, advising the product counsel team and helping to set numerous legal policies
- Worked with Chromium and Firefox teams to mitigate security outages
- Mentored over a dozen junior and senior engineers across the security, privacy, and anti-abuse organizations
- Acted as security advisor to abuse team on matters such as account takeovers, abuse imagery, and authentication systems

# Staff Security Engineer, Twitter — 2020-2021

- Lead engineer on the Information Security Consulting team, providing leadership and mentoring across organization
- Directly responsible for all security review across Twitter Spaces, Twitter Blue, and Twitter Communities features
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- Rewrote and redesigned Twitter security intake process

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# github.com/april twitter.com/CubicleApril

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#### Sr. Staff Security Engineer, Mozilla Corporation - 2015-2020

- Developed the Mozilla Observatory, a site security testing tool with over 3,000,000 users and 20,000,000 website scans
- Wrote Mozilla's widely referenced <u>Server Side TLS Guidelines</u>, and the corresponding <u>SSL Configuration Generator</u>
- Redesigned and expanded Firefox's legacy certificate viewer
- Rewrote Mozilla web security guidelines, and corresponding tooling
- Coordinated deprecation of the RC4 cipher across the browser industry
- Operated Mozilla's web bounty program
- Designed Mozilla's AWS single sign-on solution (maws)

#### Sr. Information Security Engineer, Wells Fargo - 2002-2015

- Technical team lead for the largest internal single sign-on system in the world, with over 6M authentications and 15M authorizations per day
- Project and technical lead for bank branch server encryption project, successfully deploying full disk encryption to over 12,000 existing servers across over 6,000 bank branches spread across the US

#### **EDUCATION**

• University of Minnesota, Twin Cities – BA, Psychology

#### SKILLS

- Security: transport layer security (TLS), public key infrastructure (PKI), cryptography, web security (HTTPS, CSP, SRI, etc.), mail security (DMARC, DKIM, SPF, BIMI, etc.), and web extensions
- Mentoring of junior & senior engineers
- Development languages: Python, JavaScript
- Operating systems: Windows (client and server), macOS, Linux
- Cloud platforms: AWS (S3, DynamoDB, EC2, CloudFront)

# **PUBLIC SPEAKING & PUBLICATIONS**

- Public speaker at over a dozen security conferences, including USENIX Security, Paris Web, nginx.conf, Tech People Present, Shop Talk Show, the EFF Privacy Lab, and PubConf
- Dozens of articles on security topics, such as OAuth, caching, HTTPS/ TLS, CSP, and sub resource integrity
- Security resource for publications such as <u>Consumer Reports</u>