

# JONATHAN DONAS

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## EXPERIENCE

- Amazon** **AWS Key Management Service (KMS)**
- Engineering lead for the KMS control plane API team - 5m+ TPS key encryption and signing APIs used by 100k+ customers with \$400m+ annual revenue
  - API Bar Raiser - reviewed and approved multiple new AWS service launches, influenced service launch strategies at the director-level, and advised on hundreds of new AWS API features
  - Designed and led development of multi-region key rotation for customer-imported encryption key material - KMS' #1 customer-requested feature for multiple years
  - Collaborated with S3, EC2, EBS, and other foundational services to implement internal API authorization and IAM security controls
- AWS Signer**
- Engineering lead for industry-first code signing, certificate management, and revocation features
  - Designed and led development of:
    - OCI container image signing and revocation - Signer's most-used public feature
    - SSM command and document signing - a significant cross-org collaboration
    - KMS-backed certificate service that manages signing keys for Amazon's commercial mobile apps
    - 100k+ TPS signing and revocation service for globally distributed mobile app updates
  - Optimized AWS Signer's compute resources to save \$1.2 million/year in expenses
- Apple** **Apple Pay Security**
- Developed the iOS system daemon used in the Apple Card credit application process
  - Built a Swift iOS application for internal end-to-end testing of the Apple Card signup workflow
- Uber** **Threat Operations**
- Implemented internal systems monitoring that doubled the scope of abuse detection
  - Refined security incident detection signatures that reduced inbound false-positives by half
- Difenda** **Cyber Intelligence & Digital Forensics**
- Wrote a Python web crawler to index the dark web for potentially-leaked customer data
  - Implemented a scalable distributed port scanner with AWS EC2
- Sr. Software Engineer**  
Oct 2023 – Present
- Software Engineer**  
July 2019 – Sep 2023
- Software Eng Intern**  
May 2018 – Aug 2018
- Software Eng Intern**  
May 2017 – Aug 2017
- Security Eng Intern**  
May 2016 – Aug 2016

## EDUCATION

**Univ. of Waterloo** Bachelor of Computer Science with Business Option

## TECHNICAL INTERESTS

**Security** Applied Cryptography - Encryption, Code Signing, Public Key Infrastructure | Penetration Testing

**Systems** API Design | Highly Scalable/Available Systems | AWS - Compute, Storage, Networking, Serverless

**Programming** Object-Oriented Programming - Java & Python | Full software development lifecycle

## CERTIFICATIONS

**OSCP** Pentesting - Offensive Security Certified Professional

**CCNA CO & RS** Networks - Cisco Certified Network Associate: Cyber Ops, Routing & Switching