

I'm a pragmatic software engineer with nearly a decade of expertise in designing, developing, and securing applications running in AWS. I spent the past six years securing Intercom Ruby on Rails monolith, influencing and partnering with teams on risk mitigation and developing infrastructure & application security controls.

Work Experience

Staff Software Engineer **Intercom, Inc** **October 2022 - Present**
Cloud Security Team Chicago, USA

- Led the Cloud Security team strategy enabling a re-org and influencing the team's roadmap. Delegated projects and provided planning and execution support. Mentored peers and enabled them to take on more complex projects, increasing team productivity by 60%.
- Substantially contributed to the security risk management program. Discovered new risks through threat models and security reviews. Defined mitigations and discussed them with a diverse group of engineers, managers and directors. Supported teams with the execution.
- Mitigated highest risk owned by the Cloud Security team by implementing security controls to ensure the safety and integrity of Intercom's attachments feature – used by millions of people.
- Mitigated active credential stuffing attacks by developing a reputational based ReCAPTCHA on Intercom's sign-in page. Introduced customer notifications, informing them of suspicious logins to the Intercom application – reduced account takeover attack disruptions by 30%.
- Increased the pool of people responding to security incidents by 50%, addressing engineering burnout concerns. Improved training material and introduced game-days & tabletop exercises.

Senior Software Engineer **Intercom, Inc** **April 2020 - October 2022**
Security Team Chicago, USA

- Migrated SIEM from StreamAlert to Panther. Eliminated the operational cost and allowed the team to focus on enhancing detections and onboarding data sources – improved detection and investigation capabilities by 300%.
- Enhanced Intercom's threat detection capabilities by deploying CrowdStrike as an EDR solution to all Intercom's endpoints and integrating AWS GuardDuty with Panther.
- Managed Intercom's Bug Bounty program and incorporated it in the on-call process. Reviewed and rewarded findings, and worked with the teams to address them effectively.

Software Engineer **Intercom, Inc** **February 2018 - April 2020**
Security Team Dublin, Ireland & Chicago, USA

- Introduced the Infrastructure-as-Code program at Intercom (Terraform). Developed a CI/CD pipeline enabling hundreds of engineers to safely make changes to the production environment.
- Developed a distributed malware scanner solution for customer supplied files which performs on average over 1 million scans daily and removes malicious content from Intercom's CDN.
- Developed data deleters in Intercom's Ruby on Rails monolith to meet GDPR compliance.

Systems Engineer **Intercom, Inc** **June 2016 - February 2018**
Infrastructure Team Dublin, Ireland

- Built in-house CI pipeline with Buildkite. Eradicated system failure rates and reduced test runs from 30 min to 9 min.
- Reduced the AWS EC2 cost by 66% by developing a service that leveraged EC2 Spot Instances.

Systems Engineer **Anacapa Holdings, Ltd** **January 2015 - June 2016**
Infrastructure Team Dublin, Ireland

- Improved deployment times by 400% and reduced code related incidents by 80% by introducing CI/CD pipelines.
- Built an Internal application allowing the support team to remotely monitor and configure Hotspot gateways.

Technical Skills

- Programming Languages: Ruby, Python
- Tools/Frameworks: AWS, Terraform, MySQL, Docker, Git, Panther, Buildkite, CrowdStrike, Datadog, Sentry