Martin Petkov

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Professional Experience

Security Engineer (Off-Google), *Google*

- Launched the Qualities of a Trustworthy Platform program, a large effort where I defined and measured actionable security properties of a production platform in order to drive meaningful improvements to the security posture. Automatically assesses **100+** companies across **8** qualities.
- Created 5 challenges for the the **H4CK1NG G00GL3** 🗷 CTF.
- Designed and implemented novel scanning for plaintext secrets in cloud **configurations**, remediating **1200+** secrets across **20** companies.
- Designed and implemented tracking of AWS Root Account logins over time, with alerting and remediation for frequent logins.
- (ongoing) I maintain and continuously improve the **Redlock Proxy**, a security tool deployed across all Off-Google companies to integrate with Palo Alto **Prisma Cloud**, a cloud resource management solution for AWS and Azure.
- Promoted within 1 year.

Software Engineer (Data Protection), *Google Cloud*

- Implemented new API for monitoring and auditing of regulatory requirements in GCP, as part of the Assured Workloads project.
- HeroesHealth COVID-19 study, with Terraform and Kubernetes.
- Automated generation of Terraform configs with embedded best practices for security, privacy, and data regulations for the HIPAA-aligned Architecture 🗷 .
- Developed Terraform Importer 🛽 to import existing infrastructure into Terraform state. Used in internal migration of 50+ projects.

Release Engineer (GKE), Google Cloud

- Automated legal compliance, monitoring and reviews for Anthos and GKE.
- Automated over 50% of manual tasks in the GKE release pipeline.
- Primary release manager for 20+ security and reliability incidents.
- Onboarded 50+ teams to internal release orchestration software.
- Detected and remediated 5 internal privacy and security vulnerabilities.

Software/DevOps Engineer, Security Compass

- Automated testing, packaging, delivery and upgrade of the core product (SD Elements) as a VM appliance. Reduced delivery time from 1 week to 1 day.
- Reduced release qualification time by 50% by overhauling CI/CD pipeline.
- Gave Tech Talks on CI/CD, Chat Bots, and DEFCON.

Sep 2021 – present Zürich, Switzerland

Mar 2020 - Aug 2021 Toronto, Canada

Jul 2018 - Feb 2020 Mountain View, CA, USA

> Jun 2016 - May 2018 Toronto, Canada,



Languages

Go, Python, Java, Ruby, Spring Boot, TypeScript

Cloud Products (GCP)

GKE, Cloud Build, Cloud Functions, GCS, Cloud SQL, Spanner, BigQuery, Data Studio

Cloud Products (Azure)

IAM, Compute, Containers, Automation

Infra Tools

Docker, Terraform, Kubernetes, Palo Alto Prisma Cloud

Cloud Products (AWS)

IAM, CloudFormation, EC2, Lambda, ECS, Secret Manager

Education

Bachelor of Science (B.Sc.), Computer Science, University of Toronto, St. George Campus

GPA: 3.63

2011 - 2016

Toronto, Canada

Courses

Hacking and Securing Cloud Infrastructure, Nullcon Berlin Apr 2022

Security in Google Cloud Platform Specialization, Coursera

Jul 2020

Architecting with Google Kubernetes Engine Specialization, Coursera

Jun 2020

Big Data Analysis with Scala and Spark, Coursera Oct 2017 – Dec 2017