Anthony J. Foiani

Mentor, Programmer.

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Skills

Training, Consulting, Mentoring:
Mentoring, Requirements Collection, Facilitating, Course Research / Development / Presentation / Training, Process Optimization

Languages:
Terraform, Typescript / Javascript, C++ (+ Boost), Perl, C, Shell Scripts, Python, Makefiles, Regular Expressions, Java, SQL, Ruby

Operating Systems + Platforms:
Linux, U-Boot, Windows, OSX

Amazon Web Services (AWS):
IAM, EC2, Lambda, Networking, RDS, S3, Load Balancers, CloudFront, EKS, AWS SSO, CloudTrail

Monitoring:
DataDog

Data Representation:
JSON, Protocol Buffers, XML, HTML, ASN.1, UTF-8, CSV, Compression + Archive Formats, LaTeX, PDF, GraphQL

Digital Security:
Threat Modeling, SSO/SAML, PKI (X509, CA), Smart Cards, SSH, OpenSSL, CMS, ASN.1

Compliance:
Technical Controls, SOC 2, ISO 27001, Audits, GDPR

Embedded Development:
Toolchains, Bootloader, Linux Kernel + Userspace, Flash, I2C, Realtime, Custom Hardware

Programming Techniques:
TDD, Refactoring, Threads, C++ RAII, Optimization, Patterns, Logging

Source Code Management:
git (especially GitHub), CVS, Subversion, Mercurial, Perforce

Networking:
TCP/IP, gRPC, Sockets, HTTP, SSH, NTP, SMTP

Specialties:
Code Remediation, Nuclear Safeguards, Open Source Licenses, Basic Electronics, Requirements Analysis, SQL Optimization, Basic German, various internal Google tools

Education

New Mexico State University:
Bachelor of Science, 1995
Majors: Computer Science, Mathematics
Minor: German

Publications

The Perl Journal:
"A Web Spider in One Line?" Fall 1999

Experience

Firstup: Senior Site Reliability Engineer   **2022-2023**
Production Infrastructure
- Reverse-engineered existing layout
- Extracted aspects to Terraform modules
- Migrated all prod infra to Okta / AWS SSO
- Upgraded multiple live EKS clusters
Compliance
- Technical point-of-contact for SOC 2, ISO 27001, GDPR
- Wrote multiple custom auditing tools
Education / Mentoring
- Helped less-technical colleagues access AWS
- Brought whole team up to modern Terraform standards

Airtable: Senior Site Reliability Engineer   **2020-2022**
Production Engineering
- Member of 24×7 oncall rotation with 5-minute SLA
- Managed incidents and their postmortems
Compliance
- Technical point-of-contact for SOC 2 and ISO 27001
Production Access Onboarding / Mentoring
- Provisioned privileged hardware and accounts for 20+ users
- Evolved and optimized process to handle 5x growth.

Google: Senior Site Reliability Engineer   **2013-2020**
YouTube Trust & Safety SRE
- Tech Lead and founding member
YouTube Search & Discovery SRE
- Senior member of 24×7 oncall rotation with 5-minute SLA
- Managed a YouTube-custom instance of Google Search
- Rolled out optimizations saving >20% of >1M cores
Internal Consulting, Educating, Mentoring, and Interviewing
- Created and taught multiple courses
- Mentored 10+ junior SREs to full solo oncall capability
- Recognized company-wide expert on some technologies
- Interviewed 50+ candidates

Foiani LLC: Sole Proprietor   **2009-2013**
Universal Non-Destructive Assay Platform
- Nuclear safeguards data recorder
- Custom Linux kernel, distribution, app, and UI

Activities

Contributions:
Code samples and improvement forks on GitHub
Perl samples (1998, still referenced occasionally)

More Information

Full resumé online at:
http://foiani.com/anthony/info/resume.html