

Anthony J. Foiani

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

Operating Systems + Platforms:

Linux, U-Boot, Windows, OSX

Amazon Web Services (AWS):

IAM, EC2, Networking, RDS, S3, Load Balancers, CloudFront

Data Representation:

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

Digital Security:

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

Compliance:

Technical Controls, SOC 2, ISO 27001, Audits

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

Google Internal Tools:

GCL, Borg, GSLB, GMon, Monarch, Mash, Viceroy, BorgMon,
Nebgua, COlossus, Effingo, Placer, BigTable, Piper, GoogleSQL,
SuperROot, Laelaps, Muppet, Raffia, Union, ST-BTI, FBM

Specialties:

Code Remediation, Nuclear Safeguards, Open Source Licenses,
Basic Electronics, Requirements Analysis, SQL Optimization, Basic
German

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

Airtable:

2020-2022

Production Engineering
- Member of 24x7 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+
individual users
- Evolved and optimized process to handle 5x growth.

YouTube (Google):

2013-2020

YouTube Trust & Safety SRE
- Tech Lead and founding member
YouTube Search & Discovery SRE
- Senior member of 24x7 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:

2009-2013

Universal Non-Destructive Assay Platform
- Evolved concepts and requirements
- Worked in a multinational, multidisciplinary team
- Implemented and optimized HTML-based UI
- Implemented realtime data acquisition
- Designed and implemented security features
- Created extensive API and user documentation

Yahoo:

2004-2009

Worldwide Data Distribution System
- Expanded Y! Music application of memcached
Mobile Entertainment Provisioning
- Created multi-tier, multi-client presentation
- Moved satellite office onto corporate standards
Backoffice Content Management
- Planned and executed online reorg of 60TiB
- Coordinated 10+ member team

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>