JAMES A. FRANCIS
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WORK EXPERIENCE:

Staff Software Engineer, SRE - Mozilla, Remote (2023-)
- Designed and integrated custom Google Cloud/GCP just-in-time access client with the entitlement and grant features of GCP Privileged Access Manager service to allow developers to temporarily elevate their permissions. CLI client written in Golang with Python Github Actions in support and backend defined and integrated with existing Terraform platform.
- Created custom data flow to extract Azure cost data from Azure cloud into Google Cloud and Bigquery data store.
- Simplified GCP tenant permissions via shared Terraform module

Principal Engineer, Infrastructure - Gamestop, Remote (2021-2023)
- Led 3-person team and drove processes for defining, building out, refining, and migrating 80% of the engineering teams to a Terraform/IaC-built common monitoring, Kubernetes, and CI/CD platform over the course of a year.
- Created Golang Kubernetes CRD+Operators to manage the deployment of critical applications and supported bulk of legacy Helm deploys.
- Created Python and Golang service to extract Kubernetes deployment, pod, and image metadata information for storage and reporting
- Provided on-call support and incident management for AWS environments and Kubernetes platforms
- Set up pg_stat_statements tracking of production Postgresql RDS instances to track slow queries over time and worked with engineers to speed up problem queries.
- Collaborated with security team to ensure security-related monitoring, alerting, and code/container vulnerability scanning was default in new platform and environments.

Principal Software Engineer, Office of CTO - Zulily, Seattle, WA (2020-2021)
- Coordinated and built out company tech radar, weekly cloud tagging consistency reports, and custom monthly cloud spending reports.
- Delivered education and collaboration with engineering leaders and internal finance team on clarifying and controlling cloud spend, AWS savings plans, and RI (EC2 reserved instance) usage.
- Collaborated with engineering teams for architectural, design, and postmortem reviews to ensure thorough coverage including perspectives on cost, observability, and operational burden.
- Formed and led the technology leadership working group composed of principals and team leads.

Principal Engineer, Site Reliability and Infrastructure - Zulily, Seattle, WA (2016-2020)
- Promoted and supported company-wide migration to Kubernetes and cloud (AWS and GCP).
- Automated cloud infrastructure with infrastructure as code, Terraform, in both Google Cloud (GCP) and Amazon Web Services (AWS).
- Created primary service deployment service for production website services into AWS in Golang.
- Continued supporting the e-commerce website, primary site SRE team, and data stores.

Site Reliability Engineer - Zulily, Seattle, WA (2014-2016)
- Responsible for retail e-commerce site uptime, performance, overall reliability, and capacity planning.

- Created remote service deployment and management tools for production website cool hosts and services in Python
- Created custom Golang deployment service for credit card processing service in isolated PCI environment.
- Created and maintained Saltstack IaC for all on-prem production hosts.
- Built out, provided tooling, and maintained PCI environment and multiple SOX environments
- Provided technical leadership and guidance to infrastructure and e-commerce app and site teams (Java, PHP, and Nodejs).
- Managed production web services and data stores: MongoDb, Redis, ElasticSearch, and MySQL systems.

Chef Automation Consultant - Level 11 Consulting, Seattle, WA (2013-2014)
Worked on infrastructure as code Chef cookbook automation projects in Ruby for Chef Inc, GAP Inc, Microsoft Open Technologies, MTNSat, Inc.

Software Dev Consultant - Level 11 Consulting/Synapse, Seattle WA (2011-2013)
Part of team that designed and developed a real-time analytics system in Java, Javascript, TSQL, and SqlServer for innovative traffic optimization system running at a premier property of a Fortune 100 company.

LEGACY WORK EXPERIENCE:

Project Manager/IT Site Manager - Cisco Systems, Seattle, WA (2008-2011)
Director of Operations, Pure Networks, Inc (2008)
Business Intelligence Developer, Pure Networks, Inc (2007 - 2008)
Managed team of 3-5 people for projects, public web service support, service deployments, and datacenter environment buildouts in Seattle, San Francisco, and Irvine. Provided and maintained ongoing business metrics and ad-hoc reports to management using Python, Mysql, and SQL.
Senior Systems Engineer, Visto Corporation, Seattle WA (2004-2007)
Owned end-to-end production web service operations for hosted service providing a consumer facing mobile mail Java system running on Linux and Oracle RDBMS. Part of team responsible for performance, maintenance, reliability, and capacity planning of services. Performed on-site product deployments, Java, Linux, Oracle, and training for customer-hosted version of product.
Scale Development Engineer, Visto Corporation, Seattle WA (2004)
Wrote suite of Java/J2ME/SyncML stress testing tools for cellular-targeted services. Wrote most of the company's deployment specification for on-prem server product.
Java Metadata Developer, Washington Mutual, Seattle WA (2004)
Worked with Java and XSLT to transform and load metadata into repository working heavily with the Common Warehouse Metamodel.
Systems Engineer, Visto Corporation/ ViAir Inc, Seattle WA (2002-2004)
Part of team responsible for all internal Linux systems and internal Linux build-out specification. Responsible for performance tuning and management of Oracle PL/SQL and SQLServer T/SQL stored procedures with DBA team.
Java Database Developer, ViAir Inc, Seattle WA (2001-2002)
Coded and tuned database application code with Java, PL/SQL, T/SQL, maintained product data warehousing effort.
Java Developer, Consultant, Allvest Information Systems, Seattle WA (2000-2001)
Designed and wrote code for e-commerce catalog system including infra setup (Java + Oracle RDBMS + Linux).

SKILLS:

Current:
Golang, Python, Kubernetes, Golang Kubernetes Operators, Linux, Containers/Docker, AWS and Google/GCP infrastructure and automation, Terraform, Helm, Boto3, K8s Golang-SDK, Github Actions, Gitlab CICD, basic TCP/IP networking and routing, MySQL, Aurora RDS, Postgresql, BigQuery, Mongo, Redis, Rabbit and SQS, most major application protocols (HTTP, DNS, SMTP), SSL, WAF and firewalls, observability platforms and tools (Datadog, NewRelic, Grafana, Prometheus, Percona PMM, Cloudwatch), ArgoCD, Ansible, OpenTelemetry, compliance and related remediation (PCI, SOX), mentoring, being glue

Historic:
Oracle RDBMS, PL/SQL, SQLServer, TSQL, Java, Nodejs, Splunk, Javascript, Chef, Salt, Ruby Perl, Jenkins, Shell Scripting, HTML5, C, and C++

INTERESTS:
Electronic music creation, fiction writing, cartooning, running

EDUCATION:
Bachelor of Arts in English Literature
University of Minnesota, Minneapolis, MN
Extensive coursework in Math and Physics