

Education

Master of Science (M.S.) in Computer Science

New York University, Tandon School of Engineering

2019-2020 | 3.9 GPA

Relevant coursework:

- Distributed Systems
- Network Security
- Application Security
- Big Data
- Algorithms
- Artificial Intelligence

Bachelor of Science (B.S.) in Computer Science

The College of New Jersey

2012-2016 | 3.9 GPA

Skills

- Infrastructure as Code
- Monitoring systems
- Distributed systems
- Software architecture
- Community organization
- System testing
- Property-based testing

Expert (★★★★★)

- Elixir
- Erlang
- Ruby
- Terraform/HCL
- Bash
- PostgreSQL & MySQL
- CouchDB
- GNU/Linux
- Git

Advanced (★★★★☆)

- Go
- JavaScript
- Amazon Web Services
- New Relic
- Datadog
- PagerDuty
- GitLab & Gitlab CI
- Docker

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<https://github.com/bgottlob>

Summary

Pragmatic site reliability engineer with a master's degree in computer science and over 6 years of professional software engineering experience through various stages of company growth and scalability needs from startup to mature public company. Seeking a remote opportunity to utilize strong development, operational, and leadership skills to build scalable, reliable systems and improve engineering practices and tooling.

Experience

Senior Site Reliability Engineer (SRE)

Tabula Rasa HealthCare, Inc. (TRHC) | March 2021 – Present | Moorestown, NJ

- Minimize excessive infrastructure alert noise and write actionable playbooks for incident mitigation, enabling on-call schedule
- Transition legacy Elasticsearch clusters for app log indexing to AWS OpenSearch
- Develop Terraform modules adding observability and SLA dashboards for products
- Standardize incident response and postmortem practices across the company
- Develop Elixir-based chatbot automating paging and other incident practices
- Lead observability interest group and present research on cutting-edge technologies such as OpenTelemetry
- Improve incident response time by 55%, from 42 to 19 minutes, since introducing SRE practices at TRHC

Software Engineer, Product Validation

Tabula Rasa HealthCare, Inc. (TRHC) | May 2016 – March 2021 | Moorestown, NJ

- Designed and developed cloud infrastructure enabling horizontal scaling and orchestration of regression tests using Ruby and RabbitMQ
- Supported 6 development teams in scaling tests, accelerating feedback on code changes by over 12 business hours and enabling bi-weekly releases to production
- Developed frameworks, design patterns, and production-like data generation libraries for building maintainable regression test code
- Led team responsible for testing, maintaining reliability, and managing releases of the *MedWise* web-based application suite
- Developed production monitoring tools, automated test suites, and GitLab continuous integration pipelines for *MedWise* using Ruby and Selenium
- Reduced introduction of high-impact production regressions by 100% within 18 months from the beginning of test suite development
- Responded to production incidents by analyzing logs and metrics, diagnosing root causes, and communicating workarounds and status to end users

Projects

Apex - Visualization of Racing Simulator Data

June 2020 – Present | <https://github.com/bgottlob/apex>

- Built a distributed pipeline for parsing and streaming telemetry data delivered as binary UDP packets from multiple racing simulators using Elixir

- Packer

Familiar (★★★★☆☆)

- C/C++
- Java
- Prometheus
- OpenTelemetry
- Kubernetes
- Nix/NixOS
- RabbitMQ

- Developed a Phoenix dashboard displaying live D3.js visualizations in-browser
- Created stateful, distributed functions for aggregating lap-wise statistics and streaming back to the dashboard in real time

Distributed Blog Post Clone

March 2020 - May 2020

- Created a distributed web application using Go allowing users to create brief posts and follow each other
- Designed multi-node data consistency model and failover mechanisms using etcd's Raft consensus algorithm implementation

Stock Portfolio Performance Simulator

2015 - 2016 | <https://github.com/bgottlob/portfolio-performance-simulator>

- Utilized Monte Carlo methods and lognormal price process model to simulate future returns of portfolios from historical prices
- Implemented in C and parallelized for multicore processors using OpenMP

Community Involvement

Philly Elixir

May 2019 – Present | <https://www.meetup.com/PhillyElixir/>

- Give talks, demonstrations, and provide Elixir support for interest group

Exercism: Erlang Track Mentor and Maintainer

October 2018 – Present | <https://exercism.org/contributing/contributors>

- Perform code reviews on online, open-source platform to help students write efficient, idiomatic Erlang code
- Mentored over 150 students through over 300 code reviews

Arch Linux Official Tester

2017 - 2020

- Signed off on packages and report bugs to support Arch's rolling releases

Association for Computing Machinery (ACM) - TCNJ Chapter

President (2015 -2016) | Vice President (2014 - 2015)

- Planned weekly meetings, ran computer science departmental events, and organized annual hackathon, HackTCNJ

Awards

Overall Winner | SpawnFest

2019 | <https://github.com/spawnfest/exile> | <https://spawnfest.org/2019.html>

- Built a real-time, NoSQL database service with an HTTP API backed by ETS in Elixir

Correctness Category Winner | SpawnFest

2018 | <https://github.com/spawnfest/brink> | <https://spawnfest.org/2018.html>

- Developed Elixir library for building data processing pipelines backed by Redis Streams