# Nick Gerakines (he/him)

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## Skills

- 10+ years Python
- 7+ years of Go
- 5+ years of Erlang, Java, C, C++, Perl
- 4+ years of NodeJS, JavaScript, Ruby
- 4+ years of Rust, C#, Obj-C

- 10+ years of DevOps / Sysadmin
- 10+ years of MySQL, Postgres
- 10+ years of Linux
- 7+ years of Cloud Infra (AWS, GCP, Azure)
- 5+ years of Kubernetes, Redis, Consul, Terraform

# Experience

## • GitHub Copilot

Senior Software Engineer

Remote | Ohio

March 2024 - Present

- Contributed to the release of GitHub Copilot model integrations including Open AI GPT 4, 40, 4.5, o1, and o3, Claude 3.5 and 3.7 Sonnet, Gemini 1.5 and 2.0, and variants, all at massive scale.
- Contributed to numerous product launches, features, and updates including supporting complex internal and external integrations ranging from IDEs to security and RAI.
- Developed infrastraucture and tooling to support the release of the Copilot product, and supported the
  product through incident response and triage, including the development of observability process and
  tooling to support the incident response process.
- University Of Dayton Research Institute / Air Force Research Laboratory Remote | Ohio Senior Software Research Engineer May 2023 March 2024
  - I designed and implemented network infrastructure, hardware provisioning, and virtual device provisioning using ansible and Kubernetes (k3s.io) on on-prem hardware including bespoke, purpose hardware provided by the Air Force. These networks support the full lifecycle of development, testing, and demonstration. Currently supporting multiple teams of engineers with room to grow.
  - Implemented AI / ML / CS training, execution, library, and API daemons and processes that ran on custom and commodity hardware to support the cognitively enhanced complex event processing and autonomy mission. This included complex natural language processing and retrieval-augmented generation.
  - Created job scheduling tools in Python and Rust for bare metal, virtual machine, and distributed system container orchestration and management.

#### • PredictAP

Principal Software Engineer

 ${\bf Remote} \mid {\bf Massachusetts}$ 

July 2021 - June 2023

- Implemented the proof of concept that became our core platform including AI/ML prediction engine and SaaS product using Python. Currently supporting hundreds of tenants at thousands of invoices an hour.
- Designed, implemented, maintained, and enhanced application platform and underlying AWS infrastructure using Kubernetes and Terraform. Enabled rapid scale up of tenants to new datacenters within minutes.
- As engineer #1, I worked with leadership to produce a profitable product and use its success to expand the engineering organization.

## • Datadog

Remote | New York April 2020 - July 2021

Infrastructure Engineer

 Designed and implemented replacement for DNS and Consul as primary service-discovery mechanism using multi-cluster, multi-cloud, multi-region Kubernetes operators in Go with envoy sidecars.

- Wrote internal RFCs and actively participated in the review and approval process of initiatives inside and outside of my immediate team.
- Responded to incidents and contributed to continuous improvement of our response processes and tools.

#### • Mattel

Remote | California | New York

Principal Software Engineer | Director of Software Engineering

May 2017 - April 2020

- Scaled the Sproutling organization into the Mattel Connected Products Platform division within Mattel
  that was responsible for products across major organization lines including Barbie, Hot Wheels, and Fisher
  Price.
- Worked with multiple functional and cross-functional teams to support existing and create new toy lines.
   Hot Wheels ID is an example of one product that included the creation of entirely new technologies and manufacturing processes.
- Provided consultation across the organization on technical and non-technical solutions to meet business needs. One example was the architecture of identity management systems and the wholistic replacement of mixed legacy authentication across Mattel.

#### • Colibri Learning

Pennsylvania | Missouri

Principal Software Engineer | Director of Engineering

September 2014 - May 2017

- Implemented a replacement of legacy .net application stack with modern tooling that lead to 80% reduction in production infrastructure cost and 10x increase in web application response times.
- Hired and managed team of local and remote technical and non-technical staff including .Net, Node, and Angular teams as well as technical writing.
- Performed due diligence during acquisitions and was directly responsible for technology and security onboarding of 3 brands during my tenure.

• Hightail California

Staff Engineer May 2013 - September 2014

• Blizzard Entertainment California

Sr. Software Engineer 2 March 2010 - May 2013

• Electronic Arts

Platform Architect

California

October 2008 - February 2010

• Yahoo! Inc
Software Engineer

November 2006 - October 2008

Software Engineer November 2006 – October 2008

• SixApart California

Software Engineer January 2006 – November 2006

## **Projects and Personal Experience**

#### • Patent No. 12,243,082

"Invoice processing platform" filed with the US Patent Office in November 2021 and granted March 2025. This patent covers a system and method for processing invoices using machine learning and natural language processing.

#### • Open Source Contributions

Active in the open source community through contributions to major open source projects as well as the creation and maintenance of several.

## • Developer Community and Leadership

Active in software development and technology communities and conferences. Spoke and presented at events including ACM ICFP, Erlang Factory, ATmosphere Conf, and language user groups. Organized events, presentations and have contributed to different projects and organizations that do so.

## • Facebook Application Development

ISBN 0470246669

• Managing AWS with Terraform

ISBN 9780999799604