

Jonathan Math

[linkedin.com/in/jonathanmath](https://www.linkedin.com/in/jonathanmath) | [upwork.com/freelancers/jonathanmath](https://www.upwork.com/freelancers/jonathanmath)

EDUCATION:

NYU TANDON SCHOOL OF ENGINEERING – **M.S. Computer Science**– Spring 2024 – Present

TEMPLE UNIVERSITY – December 2015 - B.A. – Minor in Management Information Systems

COMMUNITY COLLEGE OF PHILADELPHIA – Computer Science I with Java, Computer Science II with Java

CERTIFICATIONS:

- NYU Tandon Bridge - Summer 2023 – Completion with Distinction
- Certified Kubernetes Application Developer - The Linux Foundation
- AWS Certified Solutions Architect Associate
- AWS Certified Developer Associate
- AWS Certified Cloud Practitioner
- Hashicorp Certified: Terraform Associate

SKILLS & PROGRAMMING LANGUAGES:

- Backend: Python, Bash, Linux, C++
- Frontend: HTML, CSS, JavaScript, TypeScript, React
- DevOps: Docker, Terraform, AWS, Ansible, Kubernetes, Jenkins, Gitlab CI, Github Actions, DataDog, Prometheus, Grafana
- Database: PostgreSQL, MySQL, MongoDB, AWS RDS

VOLUNTEER:

DOROT USA

September 2023 – Present

Technology Coach

- Coach senior citizens in technology use to improve their communication abilities with relatives as well obtain access to online resources and applications to live better lives.

PASSERELLES NUERIKUES VIETNAM

January 2021– April 2021

Software Development Mentor

- Mentored a team of underserved software developers in Vietnam to complete a software project and develop their portfolios to present to potential employers.
- Guided students in team building, communication, project management, presentation, and software development.

PROFESSIONAL EXPERIENCE:

FORESIGHT TECHNOLOGIES

September 2022 – March 2023

Infrastructure Engineer

- Built, deployed, and tested application infrastructure for a Fortune 500 company on AWS using Terraform and Docker
- Built and tested workflows for deploying infrastructure and releasing code using Github Actions with Maven and Gradle.
- Implemented Datadog APM and observability features for Java services hosted on AWS Fargate
- Configured Java services and Github workflow runners to use appropriate networks and permissions for building images, sharing credentials, copying artifacts, and deploying to high availability environments

UPWORK.COM (Contractor)

November 2019 – Present

Software and DevOps Engineer

- Created Terraform and Github workflows to build and deploy a microservice application using AWS ECS, CodeDeploy, CloudFront, and Route53. Implement best practices for infrastructure security, reliability, cost efficiency, and Terraform code architecture.
- Maintained a “Top Rated Plus” profile for multiple years – achieving the highest possible distinction
- Designed, developed, and deployed the frontend, backend, and infrastructure for an automated quality assurance application using Django, Docker-Compose, PostgreSQL and AWS EC2. Built functionality in the application for users to test artificial intelligence development and generate performance reports.
- Wrote Docker implementations and deployed applications to the cloud. Created deployment pipelines for applications using Gitlab-CI, Jenkins, and Github Actions.
- Built unit tests and corresponding code for new features in a Django Rest Framework APIs. Built functionality in accompanying React applications to use the API.
- Wrote and deployed cronjobs to AWS to process large scale cybersecurity data using the Pandas data science library.
- Designed database schemas and wrote Python scripts to consume financial data.

NEWSBLUR, Remote

May 2020 – January 2022

Software and DevOps Engineer

- Converted an open source codebase from Python2.7 to Python3.7 and from Django 1.6 to Django 3.2
- Built Docker integrations for all microservices including Docker Compose for development as well as robust staging and production environments
- Created Ansible playbooks and Terraform configurations to automatically deploy application services and infrastructure and automate systems administration across staging and production environments
- Automated network configuration and service discovery for production environment using Consul and HAProxy for service discovery and automation of network configuration.
- Implemented new application and infrastructure observability using Prometheus, Grafana, and NetData, and Python to monitor system resources as well as application metrics. Convert legacy Python monitoring tools to Prometheus data feed formats

GREENPHIRE, King of Prussia, PA

May 2019 – December 2019

Application Developer, ClinCard

- Built new frontend and backend features and maintained code for an enterprise hybrid-architecture Django/Falcon application
- Helped convert codebase from Python2 to Python3.7
- Refactored and rearchitected payment processor software to use encryption in accordance with PCI compliance.
- Contributed to DevOps efforts in Kubernetes, Jenkins, Docker, and Docker-Compose
- Coordinated with red teams and infrastructure teams to patch security issues, redesign architecture, and data-transport systems to bring the company’s flagship payment system platform to PCI compliance

Elsevier, Philadelphia, PA

October 2018 – April 2019

Performance Engineer

- Created Slack chatbot features to run performance tests on microservices, orchestrate containers across environments, and notify statuses and alerts from performance test results
- Created Slack chat features to orchestrate microservice deployments across multiple environments
- Wrote, executed, and analyzed performance tests for enterprise applications using the Python3 framework LocustIO
- Created a Django application for reporting and analyzing performance test results
- Wrote Python automations to collect reporting data from New Relic and OpenShift using APIs and web crawling