Michel Rouly

Washington, DC

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Skills

languages scala, python, typescript, javascript, java

libraries pandas, sklearn, play, akka, cats

data sql, dagster, postgres, elasticsearch, redis

devops kubernetes, docker, terraform, helm, jenkins, drone, prometheus, datadog

aws eks, rds, iam, s3, route53, cognito, ec2, vpc, sso, opensearch

etc bash, git, sbt, npm, gpg, openapi, grpc

Work

Zephyr AI {python, machine learning, infrastructure}

(zephyrai.bio)

Principal Software Engineer

04/2021 - present

- Designed and implemented multiaccount AWS cloud architecture including networking (VPC), compute (EKS), data (RDS, S3), and identity (IAM, SSO) layers managed with Terraform.
- Introduced and implemented Python and Scala toolchains supporting a polyglot stack.
- Designed, built, and supported microservice architecture leveraging gRPC.
- Orchestrated complex data processing and model training graphs with Dagster and Python.
- Configured continuous integration and delivery pipelines using Drone on Kubernetes.

Rally Health {scala, microservices, infrastructure}

(rallyhealth.com)

Principal Software Engineer Senior Software Engineer 11/2019 - 04/2021

09/2016 - 11/2019 09/2015 - 09/2016

Software Engineer

09/2015 - 09/20

- Architected and developed greenfield user facing microservice based applications in Scala using the Play framework.
- Managed production deploys, served on-call rotations, supported 24/7 live site.
- Designed and optimized ETL pipelines using Akka Streams, accelerating data ingestion velocity and increasing data quality standards.
- Built internal developer tooling including sbt plugins, focusing on automation.
- Instrumented performance and live site monitoring metrics with Datadog, increasing observability and reducing application downtime.
- Implemented security engineering goals with a focus on user privacy; hardened applications against known and anticipated abuse cases.
- Mentored and leveled up numerous junior developers.

George Mason University {python, django, open source}

(honorscollege.gmu.edu)

08/2013 - 01/2015

Lead Project Developer

- Designed and built a collaborative research tool in Python with Django.
- Maintained multiple Linux servers hosting online content.

Harmonia {java, machine learning}

(harmonia.com)

Programming Consultant

06/2012 - 06/2013

- Created components of a learning classifier engine.
- Designed and implemented complex graphical user interfaces.

Education

M.S. Computer Science, Georgia Institute of Technology
B.S. Computer Science, George Mason University, summa cum laude
01/2017 - 12/2018
08/2011 - 06/2015

Publications

2015 ACM doi.org/10.1145/2787622.2787723

2014 ACM doi.org/10.1145/2688204.2688207

2014 IEEE doi.org/10.1109/IC2E.2014.42