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 **11/2019 – 04/2021**
Senior Software Engineer **06/2016 – 11/2019**
Software Engineer **09/2015 – 06/2016**

- 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)
Lead Project Developer **08/2013 – 01/2015**

- 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 **01/2017 – 12/2018**
B.S. Computer Science, George Mason University, *summa cum laude* **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