# Michel Rouly

37.66N, -122.27W

web michel.rouly.net github jrouly gpg 0x1DFE3B2C

## 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
04/2021 - present

# Principal Software Engineer

• 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}

Principal Software Engineer Senior Software Engineer

Software Engineer

rallyhealth.com 11/2019 - 04/2021

11/2019 - 04/202.

09/2016 - 11/2019

09/2015 - 09/2016

- 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

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