Portland, OR resume@lexicalunit.com

#### Skills

- Languages: TypeScript/JavaScript, Python, C++, ruby, Scala, Go, Zsh/Bash
- Tools: NodeJS, git, Docker, Kubernetes, JIRA/Confluence, GitLab, CMake
- Services: Amazon Web Services, Kibana, Grafana, Kafka, Sentry, PagerDuty
- Databases: MySQL, PostgreSQL, MongoDB, Storm, Vertica/Greenplum, Druid.io
- Libraries: Flask, Ruby on Rails, AKKA, Finatra, Boost, fabric, SQLAlchemy
- Practices: Agile, SCRUM, Test Driven and Behavior Driven Development
- Markup: YAML, JSON, HTML/CSS/LESS/Sass, Markdown, LATEX, ERB
- Operating Systems: MacOS, Linux (RedHat and Debian based), Windows

# Experience

## Workplace

Senior Backend Engineer - Progressive Delivery

- Maintained GitLab's Ruby on Rails DevOps infrastructure backend and Vue.js frontend
- Expanded feature flags rollout strategies to support flexible percent rollouts using Unleash
- Created the solution and a video demo for Green-Blue deployments with GitLab CI on Amazon Elastic Kubernetes Service and Google Kubernetes Engine

# Workplace

Lead Software Engineer - Studio Platform

- Built and maintained InVision Studio, a React and Electron app used by five million designers
- Led our six-person Platform squad in initial design to delivery of third-party plugins built with a TypeScript and NodeJS backend
- Organized and mentored five separate squads in development of Studio Runtime to support our next generation cloud-native platform

#### Workplace

Senior Engineer - MyFitnessPal & MapMyRun

- Lead developer of Scala-based microservice for a \$1 M Samsung partnership
- Architected an iOS and Python Find Fitness Classes feature in partnership with Mindbody
- Used ML in Python to build a patented classifier for identifying fitness classes
- Refactored existing ruby microservices to use a new real-time stream based notification system, driving 20 k push notifications and emails per minute
- Planned and implemented the migration of the MyFitnessPal steps tracking feature used by 225 M users from a Rails monolith to a Go microservice, reducing response times by 300%

# Lexical Unit

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# Workplace

Software Engineer II - Data and Products

- Instrumented iOS applications with event tracking using Objective-C++ and Swift
- Prototyped a "Buy Now" button with a Python backend leveraging Stripe.js
- Implemented a realtime high availability data pipeline using Kinesis and Storm
- Optimized Python data-engineering tools using SQL for reporting on A/B-test experiments

## Workplace

Senior Software Developer - Data Sciences

- Leveraged sophisticated data mining techniques to solve big data analytics problems
- Collaborated with research and sales teams to produce client-driven SaaS products

# Workplace

Engineering Scientist Associate

- Designed high frequency active sonar installed on 75% of US nuclear attack submarines
- Implemented a target tracking and feature classification system for mine avoidance

# Workplace

Software Engineer

- Programmed interfaces to data acquisition modules for lab machines
- Designed a mobile desorption oven as well as porosity and core gamma systems

# **Open Source**

- SpellBot: A Discord bot for SpellTable: Remote magic made easy
- nanodbc: A small C++ wrapper for ODBC, used by the R programing language
- pancake-master: A dynamic webpage for Master Pancake showtimes
- atom-notes: Embedded notational velocity for the Atom code editor
- multi-wrap-guide: Multi-wrap guides for the Atom, featured in an Atom blog post
- generator-studio-app: Scaffold generator for InVision Studio plugins
- C++ dict: Proof-of-concept C++ dict class with Python-like features
- dotfiles: My personalized machine configuration management system

#### Education

#### School

Bachelor of Science in Computer Science

- Minors in Linguistics and Mathematics
- Implemented a buddy-system memory manager and a multi-level feedback process scheduler