# Lexical Unit

## Skills

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

# Experience

# Workplace

Full Stack Developer

- Designed and built our event processing systems for distributed rule evaluations
- Initiated and led the development for our internal systems monitoring, QA, and smoke testing

# Workplace

Lead Engineer - Activations

- Thought leader and mentor on unit and load testing strategies across teams
- Planned, designed, and was primary developer for Federal EIN Verifications feature
- Designed and built our embeddable components, sealing the deal on new partners
- Collaborated with legal and compliance to build our solution for paystub printing

# 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

# 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

- Used ML in Python to build a patented classifier for identifying fitness classes
- 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%

## 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