

# Michael Joseph Rosenthal

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 [github.com/micimize](https://github.com/micimize)  [stackoverflow.com/users/2234013/micimize](https://stackoverflow.com/users/2234013/micimize)

I am a Software Engineer with over 8 years of experience and expertise at every level of the stack.

## PROFICIENCIES

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Skills: Machine Learning, Operations Engineering, Fullstack Architecture

Languages: Python, Dart, PL/pgSQL, Typescript, Javascript, bash, GraphQL

Frameworks: fast.ai, pytorch, Flutter, Django, Flask, React, AWS, GCP

Interests: Machine Learning Self Study, Meditation, Travel, Philosophy, Writing

## EXPERIENCE

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### Lead Data & Operations Engineer

Dec 2018 – Mar 2020

Environmental Defense Fund

Designed and implemented the data infrastructure for the [Air Quality Data Commons](#). Functional components included:

- A generalized air quality data pipeline, capable of ingesting a wide swath of data formats.
- A superset resource and [dashboard](#) generator for visualizing bigquery resources securely.
- Internal tools and [APIs](#) for accessing and managing data projects and [schemas](#).
- Google Cloud infrastructure management, deployments, and scripting.
- Testing and profiling frameworks to ensure future stability and data integrity.
- System monitoring and reporting frameworks and processes.
- Rigorous technical writing, including detailed documentation, roadmaps, architecture proposals, expositional issues, and user guides for a wide range of audiences.

### Fullstack Developer

Aug 2014 – Dec 2018

Freelance Consultant; Global (traveled)

As a consultant, I usually wear multiple hats, often managing AWS deployments, writing server and frontend logic, and integrating external services for the client as needed. Previous solutions include:

- An interactive ETL pipeline builder written in Clojure
- Dockerized python microservices for processing high throughput financial transactions
- A [peerassets crypto wallet](#) built with react-native

As well as a number of web applications built with Python and/or Javascript.

### Data Engineer/Analyst

Jun 2012 – May 2014

BuzzPoints; Austin, TX, USA

- Categorized millions of unlabeled records with PostgreSQL functions and modules
- Implemented PCI compliant ETL systems for sensitive, non-standardized client data
- Data reporting and visualization tools (Python, PostGIS)
- Implemented a raw text tokenization and labeling pipeline (Apache Camel, Elasticsearch)
- Managed and reported on financial data for 20+ banks and 3,000+ merchants
- Analyzed potential client data, providing market and profit analysis for data-driven sales

## EDUCATION

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Stanford/Coursera Machine Learning

Jun 2017 – Aug 2017

University of Texas at Austin

2011 – 2013

Computer Science (Junior)

## OPEN SOURCE PROJECTS

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I am an [active open source contributor](#). In addition to my larger projects, some noteworthy contributions include those to the [Frictionless Data Project](#), [graphql-code-generator](#), and to [apache superset](#).

### major graphql

Feb 2020 – Present

major\_graphql uses the dart build system and gql to generate built\_value classes, primarily for use in client side applications. It is the successor to [graphql-to-dart](#), and also resulted in a [type modeling PR to gql](#).

### graphql-flutter

Oct 2018 – Present

A graphql client for the dart lanugage and flutter, to which I am one of the top [contributors](#) and for which I actively maintain a community.

### live-neat

Jul 2017 – Nov 2017

A rtNEAT neuroevolution engine written in typescript. While it functions offline, the goal was to make a distributed, embeddable solution. Thus this project is incomplete.

### polypacker

Feb 2016 – Mar 2017

A universal javascript build and distribution tool built on top of webpack. Included sub-projects such as [jargon-parser](#), a JSON schema driven argument parser, with recursive expressivity.

### type-quotes

Dec 2013

My oldest still-used project, a Unix utility for feeding quotes to gtypist to type over. Comes prepackaged with The Art of War and The Dhammapada

References available upon request