

Fred McDavid



Framework Labs

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Portfolio: <http://www.fredmcdavid.com/work>

Profile

I compose distributed systems that are uncomplicated and highly scalable using clean architecture principles and maintainable code constructs.

Some of my recent projects include:

- **Content Tracker**, a distributed system that executes tens of thousands of background tasks each minute, querying Facebook, Reddit, Twitter and others on behalf of content authors to provide content marketing analytics.
- **KCK**, a framework for orchestrating the flow of data through a friction-free, highly scalable pipeline
- **ZCDev**, a tool for managing and sharing docker-based ZeroCater systems for local development

Skills

Web: Django, Ruby-on-Rails, Angular, Ionic, React, SASS, Bootstrap

Languages: Python, Ruby, Javascript, Typescript

Version Control: Git (vanilla, Github and Gitlab), SVN, CVS

Server automation: Ansible, Puppet, Vagrant, Capistrano, Heroku

Distributed Computing: Celery, Resque

ORM: Django, SQLAlchemy, ActiveRecord

Testing: PyTest, Django, RSpec, Cucumber, CircleCI, GitLab, Jenkins

Databases: MySQL, PostgreSQL, Redis, Cassandra, CouchDB, PouchDB

Server Administration: Linux, AWS, Google Cloud, Heroku, Nginx, HAProxy

Cloud/Container: Docker, EC2, GCE, S3, Digital Ocean, VirtualBox, VMWare

Telecommuting: Slack, Trello, Campfire, Jira, Basecamp, HipChat, Redmine

Logs/Analytics: NewRelic, SumoLogic, Graphite

Education

Experience

- Jan 2017-Present* **Framework Labs, Founder, Software and Systems Engineer**
- Developed offline-first, multiplatform application with an Angular, Ionic, PouchDB/CouchDB stack.
 - Developed [Corrigible](#), an open source utility that enables re-use and rapid development of Ansible server automation configurations.
 - Developed [KCK](#), a framework for orchestrating the flow of data through a friction-free, highly scalable pipeline.
- Oct 2017-Present* **ZeroCater, Software and Systems Engineer**
- Created a developers console CLI for managing ZeroCater code and systems.
 - Optimized background tasks and test runner to greatly reduce execution times.
 - Added features: A/B test construct, memory profiler for background tasks, headless-chrome-based pdf generator, multi-purpose docker images for development and production, twilio-based phone interactions.
 - Developed long-term strategies for improving code quality in mature, change-resistant codebase, for reducing complexity in systems and for improving the ability to test interactions between codebases.
- March 2014-Dec 2016* **Priceonomics, Software and Systems Engineer**
- Developed Content Tracker, a distributed system that executes tens of thousands of background tasks each minute, querying Facebook, Reddit, Twitter and others on behalf of content authors to provide content marketing analytics.
 - Developed Analysis Engine, a general purpose data-pipeline-as-a-service system.
- Jul 2012-Mar 2014* **Lightcastle, LC., Software and Systems Engineer**
- Developed XSLT pipeline for print-to-web processing of medical journals.
 - Optimized research-stage behavioral modification system for commercial deployments to modest, cloud-based servers.
 - Automated deployment system for Rails application
- 2007-2012* **Landmetrics, LC., Founder, Software and Systems Engineer**
- Developed distributed pipeline for processing real estate data using Ruby, Perl and Postgres
 - Developed Sadie, an open source data framework designed to minimize the work performed during multi-pass data processing.
 - Automated deployment and testing.
- 2005-2007* **Middle River Hosting Technologies, LC., Founder, Systems Administrator**
2001-2005 **Terralogic, Inc., Software and Systems Engineer**
1999-2001 **Omnet, Inc., Software and Systems Engineer**
1997-1999 **Technisource, Inc., Systems Administrator**
1996-1997 **Net Express Communications, LC, Systems Administrator, Network Engineer.**

References

Available upon request.