

Tyler Guillen

Software Engineer

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tylerguillen.com

Skills & Code

Proficient with building RESTful web applications and APIs using Ruby, JavaScript, HTML, and CSS, and a working knowledge of Python. Values clean, extensible, code backed by robust test suites. Extensive experience using frameworks like Rails, Sinatra, Backbone, and Flask, with a strong grasp of the core principles of HTTP, object-oriented design, systems, and relational databases. Comfortable with Git workflows and continuous delivery.

Recent Projects

Tracebin (<https://traceb.in>) – A service that collects application performance data from Tracebin agents. Aggregates and displays 24 hours of data, including endpoint performance, database query and view rendering overhead, and general system health.

The developer installs an agent as a Rack middleware on their production web application, which uses metaprogramming and middleware to build a detailed model of the execution flow of any given endpoint or other transactional process. It is compatible with web servers that leverage multi-threaded workflows, handling all data safely.

The server, a Rails application, uses PostgreSQL and its JSONB datatype to persist performance data collected by an agent, optimizing the data model for queryability. It displays various metrics based on that data on a webpage using Datatables and the Google Visualization library.

My Trello Rails (<https://mytrello.tylerguillen.com>) – A Trello-style application with a Rails backend and a Backbone frontend. Integrates with various third-party resources, and is backed by a robust test suite.

Work

Software Engineer - Tracebin

Takoma Park, MD; March 2017 – Present

Worked with a small team on an independent project.

- Researched best practices and common patterns for instrumenting and measuring performance statistics, data modeling, and asynchronous workflows.
- Implemented a lightweight agent to collect performance data and a built a server to handle that data.

IT Coordinator / Web Developer - Certified Contractors Network

Takoma Park, MD; October 2015 – March 2017

Researched, implemented, and monitored IT solutions for a small business with both local and remote employees.

- Reduced administrative overhead by building custom tools to manage customer data using SQL, Ruby, and JavaScript.
- Managed an on-premises Windows server with Active Directory and Exchange controllers,

MSI Learning Assistant - UC Santa Cruz

Santa Cruz, CA; September 2014 – June 2015

Facilitated small group study sessions (10-15 students) for courses in logic, involving argument structure, deductive reasoning, and formal proofs.

Math and Logic Tutor - Grossmont College

El Cajon, CA; January 2013 – December 2013

Provided one-on-one tutoring to students in all areas of lower-division mathematics and philosophy, from algebra through differential equations, and Plato through Sartre.

Education

Launch School - Online Coursework

Full Stack Web Development Curriculum, 2017

University of California, Santa Cruz - Santa Cruz, CA

Bachelor of Arts in Philosophy, 2015

- Received Highest Honors in the Major