

Kyle Fitch

(806) 441-6189 kyle@kylefitch.com <http://kylefitch.com>
<http://www.linkedin.com/in/kylefitch/>

Experience

ZenBusiness - Austin, TX

October 2017 - October 2018

Software Engineer

- Designed and lead a team building the backend for a web based service for forming legal business entities, including design of the data model, services, and integrations with external systems. The backend was written in Python, built on Django and Celery. Datastore was a PostgreSQL database.
- Designed, implemented and maintained a production REST API for purchasing of products, supporting a customer dashboard and supporting an administrative internal web application. The API was written in Python, built on Django.
- Designed, implemented and maintained an integration to Salesforce using the Salesforce REST API. The integration was written in Python.
- Integrated with Stripe for billing and subscription management using the Stripe REST API. The integration was written in Python.
- Designed, implemented and maintained an internal web application for account management, order management and order fulfillment. The application was written in Vue.js.

Wellaware - San Antonio, TX

October 2016 - October 2017

Lead Software Engineer

- Worked on a team building and refactoring a data acquisition, storage, reporting and analysis system for data from several different segments of the oil and gas sector.
- Maintained and refactored production system that ingested large amounts of machine and sensor data from field devices, processed the data using Storm with Java and persisted data to a Cassandra data store. This system also included services to compute derived data, and provide both raw and down sampled data sets to client consumers through REST services built with Java and Dropwizard..
- Refactored and enhanced an existing internal web application for configuring, managing and controlling devices. The application was originally written in Angular.js. After adding some features to the original application, it was reimplemented in React/Redux to improve performance and to make further feature additions easier to implement.
- Designed a replacement time series data service to improve reliability, fault tolerance and performance over existing service. Service included data ingestion for all field data streams, storage for raw data and querying of raw and derived data for use in other services and applications. Also implemented a proof of concept version of the service. Scala and Akka were used for the service and Cassandra for the data store.

The Heavy Equipment Exchange - Austin, TX

February 2016 - October 2016

Senior Software Engineer

- Worked on a team building an online private wholesale marketplace for used heavy machinery.
- Maintained and refactored existing code and designed, implemented and deployed new functionality to backend system. The backend system was a Java and Spring Boot based application deployed on Heroku, using Spring MVC for REST services and Spring Data for connecting to the MongoDB datastore. Akka was used for asynchronous jobs. Java 8 was used to make the code more functional in nature.
- Maintained and refactored existing code and designed, implemented and deployed new functionality to a JavaScript single page web application. The web application was Backbone/Marionette based deployed on Heroku, using REST to communicate with the backend system. ECMAScript 2015 was used to make the code easier to maintain and refactor.
- Designed, implemented and deployed a backend service to collect, process and store data from public web sites using Akka and Spring Data.
- Refactored existing Reactor asynchronous jobs to use Akka.

Fathom - Austin, TX**May 2015 - January 2016****Senior Software Engineer**

- Worked on a team that is creating a management and administration system for smart grids used by water utilities. System collects data from different vendor meter systems, and offers cloud based services to manage the grid, facilitate maintenance and provide customer services such as billing and usage information.
- Designed, implemented and deployed code to communicate with vendor hardware using SOAP and REST services, extract data and transform it to a common data format using an Akka cluster for processing, Cassandra for storing state during transformation and PostgreSQL for storing transformed data, all implemented in Scala.

HelpSocial - San Antonio, TX**September 2014 - March 2015****Software Engineer**

- Designed and deployed an Apache Storm cluster and implemented Java topologies to receive, process and persist social media data streams.
- Designed, implemented and deployed backend REST services for the core business application using Scala, Akka and Spray.

Brandon and Clark, Inc. - Lubbock, TX**July 2007 - September 2014****Lead Software Engineer**

- Created, designed and lead the implementation of a software system to automate transaction entry, control and management of water disposal wells used in the oil and gas industry. The system has two major components, a web application for system management and a remote embedded application. Currently the system is deployed at more than 100 remote sites, with each site generating an average of 150 transactions per day. The web application is accessed by an average of 50 users per day. The current version of the server side consists of micro services implemented in Scala and built with Akka framework and a web application implemented in Scala and built with the Play framework. Previous versions were built with JavaEE with EJB's, Java servlets, JSP and also the Grails framework. The embedded application was also implemented in Scala and built with the Akka framework. Earlier versions of the embedded application were implemented in Java.
- Designed and led the implementation of a system to receive, process and persist telemetry data from the deployed stations in the form of MQTT messages. The system was implemented in Scala and built with the Akka framework.
- Programmed various PLC's and microcontrollers.
- Implemented the Modbus protocol in Scala to more easily communicate directly with PLC's from our embedded systems.
- Supervised the administration of the Linux servers running the software services.
- Supervised customer technical support for the software services.
- Designed and implemented an application for data acquisition and automated testing of submersible pumps. The test data was saved in a MySQL database and the application included test report generation. It is written in C# on the .NET framework.

NTS Communications - Lubbock, TX**March 2002 - June 2007****Senior Systems Administrator**

- Planned and supervised the deployment of a clustered email server system. Deployment included migrating approximately 80,000 customer email accounts, including emails and saved files.
- Managed internet service provider servers, including email, web hosting, DNS, DHCP, RADIUS, logging and monitoring.
- Deployed and maintained a SAN for email and web hosting storage.
- Managed server network infrastructure.
- Provided technical support for web hosting customers.

Professional Skills

- **Languages:** Scala, Java, JavaScript(ECMAScript 2016), Python, Groovy, Haskell, Erlang, Elixir, Elm, C/C++, C#, Assembly, PHP
- **Web Applications:** Akka, Vue.js, React/Redux, Angular, Play, Spring MVC, Django, Backbone, Marionette, Phoenix, Scalatra, Grails, Scala.js, Lodash, jQuery, Prototype, JSP, Servlets, REST, Apache Thrift, XML, XSLT, HTML, CSS, Less
- **Cloud Platforms:** AWS EC2, AWS Lambda, Google Cloud Platform, Heroku, Rackspace Cloud Servers
- **Data Platforms:** Apache Storm, Apache Spark
- **Datastore:** MySQL, Aurora, PostgreSQL, DynamoDB, Cassandra, MongoDB, Redis, Spring Data, Hibernate
- **App Servers:** Tomcat, Jetty, Glassfish
- **Systems:** Linux, OS X, Solaris, Windows
- **Virtualization:** Docker, VMware ESXi, Solaris Containers
- **Repositories:** Git, Mercurial, Subversion
- **Practices:** TDD, Agile, Scrum, Kanban

Education

Texas Tech University, Lubbock, TX, 1997 - 2002, Computer Science