Software Engineer - Elixir

06/2021 - 08/2022 (14 months)

BlockFi - Remote

- Worked on the Crypto Payments team where we were responsible for all crypto deposits and withdrawals on/off the platform. Primary focus was decoupling multiple API services from the main monolith service. Integrated OpenTelemetry stack to observe system perform with dashboards and alerts.
- Saved significant costs to the firm by implementing a withdrawal fee ceiling. This feature delayed transaction processing until withdrawal fees came down. The fee ceiling was adjustable in real-time to account for dynamic market conditions. Reduced fess from 31% over network average to 11% below network average.

Software Engineer - Elixir

02/2020 - 05/2021 (16 months)

ScriptDrop – Remote

- Rapidly helped build and ship an SMS initiated prescription delivery experience for customers. Allowed customers to complete a short form, fill the prescription at their pharmacy, then dispatch a driver to their home.
- Developed a new order fulfillment architecture for our on-demand delivery partners. Supplemented a GenStateMachine based system with an Oban based system. The new architecture was easier to reason about and fulfilled the requirements of the existing system. Deployed system with the launch of Uber as a delivery partner.

Software Engineer - Elixir

08/2016 - 01/2019 (29 months)

onXmaps – Missoula / Bozeman, Montana

- Boiled the ocean by replacing a RoR backend with Elixir / Phoenix. Developed data models based on existing MySQL database and a RESTful API for mobile and web clients. On launch our system did a just in time data migration as users logged in.
- Lead backend design and development on a feature team for social login using OAuth 2.0. Social login resulted in more account creations by reducing friction. Leveraged Google Cloud PubSub to create a soft real-time system for our users with Play store subscriptions. Resulted in our system being in sync with the payment provider and seamless product access for our users.

Research Assistant - Javascript

08/2013 - 05/2015 (21 months)

Center for Research in Extreme Scale Technologies, Indiana University – Bloomington, Indiana

Worked on a small team of PhD candidates focused in the areas of network topology, instrumentation, and performance testing. Developed a full-stack asynchronous single page application built on top of WebSockets using Node.js and AngularJS. Integrated as a layer in an existing network instrumentation and measurement system.

Software Developer - Ruby on Rails

06/2012 - 07/2013 (13 months)

Leadership Computing Facility, Oak Ridge National Laboratory – Oak Ridge, Tennessee

Master of Science in Computer Science

Graduated May 2016

School of Informatics and Computing, Indiana University – Bloomington, Indiana

Bachelor of Science in Computer Science

Graduated Dec. 2012

College of Basic and Applied Sciences, Middle Tennessee State University – Murfreesboro, Tennessee