# Drew Kerrigan

571.296.7081

drew@kerrigan.io

## **Summary**

Experienced and high performing software engineering generalist, driven by curiosity and the desire to write quality code used by millions of people. Interested in solving hard problems, learning new technologies, and open-source software.

## **Professional Skills**

#### Languages

- Golang
- Erlang / OTP
- Elixir
- Python
- C/C++
- Java
- Node / JS
- Solidity

#### **Specialties**

- Software Development
- System Architecture
- Infrastructure Automation
- Performance Benchmarking
- Networking / Load Balancing
- Data Modeling
- Distributed Systems
- API Design
- Data Pipelines

#### **Technologies**

- Kubernetes
- Mesos
- Kafka
- Nifi
- Minio
- Ethereum
- Elastic
- Containers
- Messaging Queues

# **Previous Employment**

### Institutional Shareholder Services MAY 2018 - PRESENT

LEAD SOFTWARE ENGINEER - INNOVATION LAB

Lead a small team responsible for architecting and deploying an Apache Mesos based data platform for container orchestration, machine learning pipelines, data services, and GitOps. Wrote automation software, including CI/CD pipelines, Ansible, and Mesos frameworks to deploy and manage Kubernetes clusters, databases, and several internal applications. Open source projects include a Apache Nifi processor for the Stanford NLP library: Blog Post: Augmenting Data in Pipelines with NLP, and an Apache Mesos framework to orchestrate the deployment of Ethereum blockchain clusters: Blog Post: Ethereum on DC/OS.

Utilized: Golang, Erlang/OTP, Python, Java, Solidity, Node + ReactJS, Kubernetes, Mesos, DC/OS

Notable Projects: <u>Mesos Framework: dcos-ethereum, Mesos Framework: dcos-besu, Nifi Stanford Core NLP Processor</u>

# Mesosphere AUGUST 2016 - MAY 2018

SOFTWARE ENGINEER - SYSTEMS AND NETWORKING, SOLUTIONS ARCHITECT

Worked on the engineering team with a focus on networking and service discovery components of the DC/OS (Datacenter Operating System) product. Software defined networking / infrastructure make up the majority of the networking team's responsibilities. Projects include Marathon-LB, Mesos-DNS, Navstar, and Spartan for service discovery, DNS propagation and management. Lead architect and developer Edge-LB, a distributed layer7 load balancer built on DC/OS and Apache Mesos as a framework. Worked on-site and remotely with DC/OS customers performing a variety of professional services including system architecture design, software development, distributed systems and Mesos consulting. Delivered services to DC/OS / Mesos users with broad backgrounds in the financial, gaming, telecom, and media / entertainment industries. Employed knowledge and experience with containers, data pipelines, messaging queues, network architecture, and system administration.

Utilized: Golang, Erlang/OTP, Python, Java, C, Lua, Mesos, DC/OS

Notable Projects: Edge-LB (Closed-Source), Mesos-DNS, DC/OS Net, DC/OS Adminrouter

## Basho Technologies MAY 2012 - AUGUST 2016

PROFESSIONAL SERVICES ARCHITECT

Delivered professional services and architecture consulting with a focus on large scale system architecture and backend development. Supported full product lifecycles for Basho products, community driven projects, and client uses-cases / applications. Became very familiar and proficient with a variety of technology stacks. Client facing software/devops consulting from architecture to deployment and everything in between. Also contributor to open source software projects as well as many projects internal to Basho. Focused on distributed systems and building data solutions for difficult problems.

Diving into new technologies and platforms and quickly becoming proficient in fast changing environments according to customer needs and project requirements.

Utilized: Erlang/OTP, Golang, Mesos, Ruby, Node.js, Python, Java, Hadoop, Riak, Riak CS Notable Projects: Riak Mesos Framework, Riak Explorer, Riak Elixir Client, Riango, Nagios HTTP JSON

## Stella & Dot MARCH 2011 - MAY 2012

SENIOR SOFTWARE ENGINEER

Worked under the lead architect during the complete re-architecture of the production site of a complex direct sales e-commerce application. Was responsible for large pieces of a multi-tier system with functionality spanning the central API layer integrating with internal and external services, e-commerce, and writing RESTful services to tie them all together. Also worked with multiple vendors to integrate services.

Utilized: Amazon Web Services, E-Commerce Platforms

## Lockerz, Inc. NOVEMBER 2009 - MARCH 2011

LEAD SOFTWARE ENGINEER

Played an integral part in the complete re-architecture of the production site of a highly scalable social network. Helped architect and implement the middle to backend tier using PHP (Codelgniter). Owned the core services project as part of the platform team which integrated with the large scale data access layer (Java over ICE) as well as multiple external APIs. Self appointed security auditor of our code due to endless attempts by hackers to get around user interfaces and gaming our system. Gained experience in e-commerce (Magento), media players (images and videos), and social network application engineering.

Utilized: Java, E-Commerce Platforms, ActionScript, Amazon Web Services

## Swift June 2007 - NOVEMBER 2009

SOFTWARE ENGINEER

Implemented incremental enhancements given customer input for several products on varying frameworks. Designed and implemented multiple data driven web applications including a Scrum planning system that is still being used.

Utilized: Emerging MS technologies, Java, Oracle

#### **Education**

# West Virginia University 2003 - 2007

COLLEGE OF ENGINEERING

Bachelor of Science in Computer Science