IAN CLARK

ian@ianleeclark.com

TECHNICAL SKILLS

Languages	Python, Go, Kotlin, Javascript, Elixir
Frameworks	Vue.js, React, Flask, Spring, Phoenix
Datastores	MySQL, Redis, Postgres, Elasticsearch, MongoDB
Tools & Miscellaneous	AWS, Heroku, Docker, RabbitMQ, Celery, Kafka
Github	https://github.com/IanLeeClark

EXPERIENCE

Byrd Technologies GmbH

Senior Python Developer   *May 2019 - Current*

Scaling our charging process to handle consuming 1.2 million monthly events, annually saving 40k USD.

Writing a client library to convert OAS 3.0 API specifications to callable Python saving many hours of man-power and code churn.

Rewriting our picking process to allow workers to pick products 32% more efficiently.

Mentoring incoming developers to ensure a consistent culture and knowledge-base.

Numerous small, but nice-to-haves, such as: automating deploys, automating library archiving, building a documentation-heavy culture, and improving database indices across all databases.

Packlane

Software Engineer (Remote)   *December 2017 - May 2019*

Creating a pricing pipeline to better handle on-boarding new manufacturers, pricing changes, and to ensure pricing is correct, while enabling the recovery of around 16k USD/month caused by pricing bugs.

Porting core business functionality from Meteor to Elixir and React to ensure a smooth transition from MongoDB to Postgres.

Improving service reliability (from 99.9% to 99.999%) through application supervision (systemd) and properly partitioning legacy asset management onto separate servers through NFS.

LeMans Corp.

Software Engineer   *December 2016 - December 2017*

Utilizing Elasticsearch to serve as the primary search engine within our e-commerce platform–storing and indexing over 20k products with 480k derivatives of those products.

Writing ETL pipelines to retrieve and sync e-commerce data from legacy (MSSQL) databases into our modern platform databases (MariaDB, Postgres, and Elasticsearch).

VirtuCrypt

Web Application Developer   *November 2015 - December 2016*

Rewriting a TCP multiplexer in Go for a 3200% command throughput gain over Python.

Creating a new service offering (Transparent Encryption Layer) allowing for customers to encrypt and decrypt files on-demand utilizing third-party storage providers (AWS S3, Box, Google GCS, &c.) without access to encryption/decryption keys.

Architecting and building a customer-facing RESTful API (Python, Flask, Postgres) allowing cloud-based asymmetric key management, cryptography for point-of-sale devices, debit processing, and remote key injections.

PERSONAL PROJECTS

Paseto (Elixir Implementation)   Primary language: Elixir

An implementation of the Paseto (Platform Agnostic Security Tokens) protocol. Paseto is essentially a JWT alternative with much saner defaults and fewer ways for developers to break security.

More information can be found: https://paseto.io

Notorious   Primary language: Go

Utilized technologies: Redis, MySQL, Docker

A feature-complete Bittorrent tracker used to serve Linux and BSD OS distributions. Implemented in Go using Redis to store and quickly serve (short-term) peer information, MySQL or Postgres to track (long-term) peer information, and Docker for Continuous Integration and Continuous Deployment.

Olivia   Primary language: Go

Utilized technologies: Bloom filters, Distributed Hash Tables

A Distributed, NoSQL key-value storage utilizing bloom filters for efficient key searches throughout the network and built upon a distributed hash table.

EDUCATION

The University of Texas at San Antonio

Bachelor of Business Administration in Economics   Date of Graduation: May 2015