# JOSHUA OSTER-MORRIS

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Atlanta, GA

#### **EDUCATION**

#### **B.S. in Information Technology**

Aug 2000 - Jun 2002

Tucson, A7

## **SELECTED SKILLS**

#### **AWS**

EC2 ECR EKS CloudFormation CloudTrail Cognito DynamoDB IAM KMS Lambda [RDS] S3 VPC

#### **GCP**

Al Platform | AppEngine | BigQuery | Bigtable Cloud Dataflow Cloud Functions Firebase GCE GCS GKE IAM

## **DevOps**

Docker Kubernetes Prometheus Cortex Grafana | Helm | Jenkins | Git | Redis | Kafka Serverless | Airflow

### **General Programming**

Java C/C++ C# Rust Python Node.js Scala

## Mobile Programming

Java (Android) Objective C Swift C# (Windows Mobile)

## Web Programming

Angular | Three.js | Hugo | Polymer | TypeScript | React Coldfusion

#### Rust

Rusoto | Serde | bindgen | wasm-bindgen | PyO3

#### **Pvthon**

[pandas][NumPy][TensorFlow][Tornado][boto3]

## **Database**

MS SQL Server TSQL Accumulo Geospatial Expert | Bigtable | Firebase BigQuery Foxpro

#### **Electronics**

FPGA VHDL Digital electronics design Analog electronics design | Firmware | Bootloader Bluetooth PCB Layout KiCad Eagle LT Spice

#### Other

Apache Beam VTK Jersey 2 Linux Bash Linux Kernel Drivers | SOC 2 | Scrum Master Azure AKS

### **LINKS**

View this resume as a WebAssembly app: craftvcoder.com/cv

View the source code: github.com/craftyc0der/resume

### **ABOUT ME**

- Experienced tech team leader. Full-stack site reliability engineer. IoT electronics
- Lifelong learner interested in solving hard problems. Manifesting new things into reality is my passion. My career has taught me that execution trumps ideas. Great things do not just happen. They are made by applying creativity, grit, and hard work.
- My experience is in software, hardware, and their interface. I am equally comfortable designing a high performance compute cluster, a tiny circuit, or a mobile computing interface to bring the other two things together. Managing a network of human resources and applying their narrow talents to a complex problem is the path to success.
- Voracious reader of history. Math nerd. Guitarist. Husband. Father. Entrepreneur.

### **EXPERIENCE**

## **Senior Director of Cloud Technologies OnScale**

Jun 2018 - Present

- Hire and lead team of talented professionals with the intention of changing how engineering is done.
- Ground up design and implementation of patented asynchronous HPC scheduler for physics solvers on multiple clouds via Kubernetes, enabling highly parallel and multi-node simulations on-demand with end-to-end encryption.
- Ground up design and implementation of CI/CD infrastructure for the microservice application stack.
- Ground up design and implementation of application APIs responsible for tracking and billing of all aspects of the product offering.
- Ground up design and implementation of browser-based 3D spatial results visualization system. Capable of playing animations of 50GB datasets at 30FPS without massive data downloads with client-side rendering.
- Owner of and contributor to our core simulation APIs framework, which has bindings to multiple programming languages and compiles generically for any physics solver.
- Owner of multi-cloud infrastructure monitoring system.
- Responsible for all security and organization best practices. Earned SOC 2 compliance, lead AWS Advanced technical reviews, own disaster recovery plans.

## **Principal**

#### DC Control Systems, LLC

Mar 2013 - May 2018

Atlanta, GA

Designed for manufacture a 1500W automotive power distribution unit. Demo Developed mobile applications and cloud software to provide in vehicle and motor pool situational awareness for customers.



- Designed for manufacture a water purification sensor capable of distinguishing between salt water to distilled water at 0-70C, which is 8 orders of magnitude of sensitivity in a transimpedience circuit.
- Assisted recently acquired MEMS manufacturer to attach their novel sensors to MCUs, and Android. My code is running in Tesla automobiles I am told.

#### **Principal**

## Global Health Data Systems, LLC

Nov 2011 - Dec 2015

Atlanta, GA

- Developed mobile versions of VAERS (Vaccine Adverse Event Reporting System) for CDC as primary contractor. My firm ran trials of the platform in clinics in multiple states to show success metrics relative to the fax-in forms.
- Developed novel algorithms to search next-gen DNA sequences on custom silicon. Reduces energy cost per sequence by many times over traditional CPU based methods.

## **Software Architect**

### **Data Services Inc**

Jul 1999 - May 2018

Tucson, AZ

 Ground up design and implementation of real property risk management

Demo software tool responsible for insuring the majority of real property transactions in several states.



mortgages and extract parties, legal descriptions, and amounts to reduce data entry costs. Trained on TBs of images and data.

• Built a highly effective LSTM recurrent neural network to read deeds,

Owner of production quality data entry software system optimized for high accuracy and low time waste.