

# Joshua Goller

Programmer / Cyberpunk / Console Cowboy

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## TL;DR

Self-taught software engineer. Obsessive about understanding problems before proposing solutions, solving the *right* problems, and optimal balance between “most correct” and “least complicated”. Focused on helping build cutting edge tech you’d see in *Blade Runner* (autonomous driving, wearable computing, etc) without it becoming a dystopian trope. Work experience in data engineering, infrastructure, and security across companies of every size (seed, pre-IPO VC rounds, IPO, and large/public corporation). Batteries included, parental supervision not required.

## EXPERIENCE

### Meta

Reality Labs, Developer Infrastructure and Automation - *Software Engineer*

2024

- Designed and implemented testing platform, combining prototype hardware with device emulators improving test capacity for 30% of AR glasses teams
- Managed contractor team in assembly and installation of AR glasses prototype device lab containing 200+ devices
- Participated in quality focused “lockdown”; led cross-functional effort to deep dive and resolve core connectivity issues for new device racks with 4x capacity

### **Independent Study**

2022-2023

- Wrote [Sprawl](#), a minimal 2D game engine, including entity-component system with runtime reflection, tunable logging system, and optimized build system (compiles and links ~5k LOC in < 5 seconds).
- Built [working computer](#) in [Turing Complete](#); implements custom assembly language and basic algorithms (bubble sort, recursion) with components designed from logic gates
- Studied math with [Mark Moon](#); focused on proof-writing skills in introductory real analysis and linear algebra

### Uber

Marketplace, Surge Pricing Team - *Software Engineer*

2021

- Launched a surge pricing system to over 300 cities in Latin America, optimizing multi-million dollar per-city budgets
- Built data pipelines, metrics, and dashboards for tracking budgeted-vs-actual spending in each city (Python, Pandas, Spark)
- Wrote the library and CLI for use with in-house job scheduler enabling regular updates to low-cost option rideshare product (Python)

Advanced Technologies Group, Perception Team - *Software Engineer*

2019-2021 ([acquired by Aurora Technologies Inc.](#))

- Co-owned data pipeline for creating multi-sensor (Lidar, Radar, camera) datasets (10s of TBs) for training computer vision deep learning models for self-driving vehicles (Python, PySpark, Pandas)
- Built error-handling tools for dataset creation compute workloads; reduced spurious failure rates by ~50%, enabled fast debugging of actual failures, and reduced compute use by ~20%
- Contributed to [TetrysTables](#) - in-house library for reading/writing multi-sensor datasets (Python, Pandas). Led API v1 deprecation; migrated customers (ML engineers) to v2 API.

Advanced Technologies Group, Cloud Infra Team - *Software Engineer*

2017-2019

- Authored cost accounting system for AWS (Python, Lambda)
- Organized and executed production Redis cluster migration
- Completed various AWS infrastructure ops / SRE tasks (Terraform, Puppet)

### **[Adentro](#) (fka Zenreach Inc)**

Foundation Platform Team - *DevOps Engineer (first)*

2017

- Developed AWS infrastructure for product teams (ECS, MongoDB, Prometheus, Shippable, various AWS services)
- Functioned as 1 of 3 SREs for ~100 person company; mitigating outages, managing production deployments, etc.

### **[PokitDok Inc.](#) (acquired by Change Healthcare)**

Core Infrastructure Team - *Security/DevOps Engineer*

2015-2016

- Developed AWS infra for product teams (Ansible, Terraform, S3, EC2, etc)
- Organized and executed [HITRUST](#) certification process for HIPAA data

### **[Morta Security Inc.](#) (acquired by Palo Alto Networks)**

Malware Research Team - *Software Engineer (employee #3)*

2013-2014

- Reverse engineered known malware strains (Reveton, Mazben, Skydance) and developed detection signatures (IDA Pro, Wireshark, windbg, gdb)
- Developed Windows kernel module for malware behavior analysis (C89, x86)
- Attended [Advanced Windows Exploitation](#) class at BlackHat 2014

### **[WhiteHat Security Inc.](#)**

Threat Research Center - *Application Security Specialist*

2012-2013

- Tested client websites for front-end vulnerabilities (XSS, CSRF, spoofing, etc.)

## **EDUCATION**

- College of Charleston (AUG 2010 - NOV 2012) - pursued BS in CS
- The Citadel (AUG 2008 - AUG 2010) - pursued BA in English, transferred