# Jorge Sepulveda

# Systems Administrator · Software Engineer

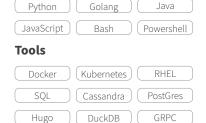
Software Engineer with 4 years of experience troubleshooting and building distributed systems. Currently run systems controlling natural gas plants and processing their data in real time. Passionate about technology and always making sure computers behave in the products I build. I'm hoping to join the ranks with the world's most ubiqitious developer platform.

## **CONTACT**

121	Spring, TX
	+1-512-909-9827
$\vee$	gSepulveda9697@gmail.com
0	jorge-sepulveda
in	jorgesepulveda
<b>(</b>	jorgesepulveda.dev

## **SKILLS**

## **Programming Languages**



#### Languages

English	(Fluent)
Spanish	(Fluent)

# **PROJECTS**

#### Clay-Bang

Skeet shooting simulator made in Lua and Love2D.

## Py-Expenses 🖸

Financial statement tracker using Pandas and DuckDB for fast in-memory analytical queries.

#### Re4-Pick-A-Gun 🖸

Randomized weapon picker for creating interesting playthroughs for the Resident Evil 4 Remake videogame

# EDUCATION

## **Texas A&M University**

College Station, TX

2016-2021

**B.A IN COMPUTING** 

• Dwight Look College of Engineering, Computer Science and Engineering.

- $\bullet \ \, \text{Specialization in Geographical Information Systems and Technology with an emphasis on Geodatabases} \\ \text{ and Geocomputation.}$

# EXPERIENCE

## **BXG Systems**

Houston, TX
May 2024 - PRESENT

SYSTEMS ADMINISTRATOR

- Served as an interim Project Manager to streamline communication for 15 people spread across 4 teams.
- Maintain multiple distributed systems across West Texas that are responsible for PLC control systems,
   Human Machine Interfaces and logging to Microsoft SQL Databases.
- Provision servers at sites and assist in starting up plants, ensuring process data and alarms are good to go when gas is introduced.
- Automated PLC I/O extraction using Python for stakeholders to identify where equipment is landed, increasing productvity by 80%

## **American Express**

Phoenix, AZ

SOFTWARE ENGINEER I

Feb 2024 - May 2024

- Migrated APACS40 cardholders to the new microservice architecture, enabling support for over 2 million cardholders.
- $\bullet \ \ \text{Led succeeding migrations for the Golang API, migrating cardholders from Germany, Australia and Japan to the new system.}$
- Migrated Cassandra databases to on disk clusters after performance testing indicated virtual machine database latency climbed to 100 milliseconds.
- Generated fake data using Python for performance testing after database migration. With the initial
  data inserted, we processed 200 transactions every second, totaling 432,000 database reads and 172,000
  writes over 24 hours with with transactions averaging 30 milliseconds.
- Became the deployment champion, responsible for the API's Docker deployment and environmental issues for staging, testing and production environments.

#### **American Express**

Phoenix, AZ

SOFTWARE ENGINEER II

Feb 2023 - Feb 2024

- Worked on Golang RPC API responsible for capturing financial data and approving the transaction before
  it moves to settlement.
- Led development of APACS40, a payment specification with the end goal of migrating cardholders from the legacy Java system to the new microservice architecture.
- Assisted in production support, using Kibana and Graphana to identify faulty transactions that required manual reinsertion to the Cassandra Databases.
- Used Python to identify duplicate transactions after a major impact to the system. Created custom Kibana queries to identify and stop duplicates from being processed, avoiding a financial impact worth 3 million dollars.

#### **American Express**

Phoenix, AZ

Aug 2021 - Feb 2023

SOFTWARE ENGINEER III

- Maintained a Java REST API responsible for holding and cycling encryption keys for surrounding subsystems to request data and authenticate transactions.
- Added Unit Tests to the Java API, connecting to a dummy Couchbase database and simulate key retrieval and rotations, increasing reliability.