

Joshua O'Callaghan

Greater Phoenix Area • jcallaghan1250@gmail.com • [LinkedIn.com/in/joshuaocallaghan](https://www.linkedin.com/in/joshuaocallaghan) • www.jocal.dev

EXPERIENCE

Senior Software Engineer

April 2025 - Present

Walmart

- Directed a team to develop an AI-assisted chatbot that improved efficiency in retrieving and managing inventory systems across 4 markets for ~5,000 stores.
- Led efforts to reduce yearly database costs by \$400K+, optimizing workloads across Cassandra, Cosmos DB, and Azure.

Software Engineer - Cloud

June 2023 - April 2025

Intel

- Optimized Kafka workload for client, doubling throughput while reducing CPU utilization by 20%.
- Improved compression workloads for clients, achieving a 12x increase in compression pipeline speed.
- Managed cloud environments (AWS, Azure, GCP) and internal server systems for the broader team.
- Ensured all systems were vulnerability-free while reducing cloud costs by 6% year over year.

Software Engineer - Media Processing

May 2021 - June 2023

Intel

Chandler, AZ

- Automated benchmarking and data collections to improve efficiency by 500%.
- Performed media analysis across various cloud/physical machines and optimized bottlenecks upwards of 80%.
- Created online tool for visualizing performance, used by 3+ teams to track over 150 Intel product skus.
- Led a team of engineers and stakeholders to deliver competitive media analysis.

Software Engineer

Sept 2019 - May 2021

Intel

Chandler, AZ

- Visualized data for error analysis with tools such as Plotly, and Tableau, reducing issue resolution time by 70%.
- Assembled various Python and Bash scripts for machine fab automation.

Software Engineering Intern

June 2019 - Aug 2019

American Express

Scottsdale, AZ

- Redesigned data infrastructure, enabling 2 teams with seamless data integration.
- Administered 4 server nodes running unique applications with Kubernetes, ensuring 99% uptime.

Software Engineering Teaching Assistant

Jan 2019 - June 2019

Arizona State University (CSE 340)

Tempe, AZ

SKILLS

Languages Proficient Python (6yrs) Intermediate SQL (3yrs) Java (2yrs) C/C++ (2yrs) Beginner Javascript C#

Software AWS, GCP, Azure, Terraform, Ansible, Docker, Kubernetes, Elasticsearch, Git, Bash

Soft Skills Leader, Communicative, Problem Solver, Innovator, Detail Oriented, Always Learning

PROJECTS

Disciple Assistant | Personal Project (~80 hours)

Dec 2024

- Used JS, YT pub sub, YT API, ChatGPT API and SQL to deliver discipleship automation for Impact Church

Weather Dashboard | Personal Project (~50 hours)

Oct 2024

- Used Python, Elasticsearch, Logstash, Kibana and OpenWeather API to create an automated real-time dashboard

Discord Bot Development | Personal Project (~30 hours)

Mar 2024

- Used Python, Discord API and ChatGPT API to create a management bot for a discord server

EDUCATION

Arizona State University, Ira Fulton School of Engineering

Master of Computer Science

Excelling Coursework: Data Structures and Algorithms, Advanced Algorithms, Distributed Databases

ACTIVITIES

Machine Learning Data Engineer - Evaluated coding performance on Claude, ChatGPT, Gemini, and other LLMs July 2024

Google HashCode Competition - Placed 44th in US, 844th globally

Feb 2020