

AHMED JAZZAR

Software Engineer

+1 (408) 359-7321 @me@ahmedjazzar.com San Jose, California, USA

INDUSTRY EXPERTISE

Web Development (Django)



DevOps



Web Development (React)



System Architecture



Mobile Apps Development



Open Source Development



EXPERIENCE

Release Engineer

Google

07/2022 - Ongoing San Bruno

A team member of Youtube Living Room team

- Automating the Cobalt browser release process to open-source developers.
- Built and maintained secure micro-services to perform CI/CD operations using gRPC, Python, and Kubernetes.
- Wrote and contributed to product design and performed security reviews on them.
- Building tools that improve development velocity, code quality, and code health in a complex, matrixed organization.

Research Software Engineer

IBM

11/2021 - 07/2022 San Jose

A team member of the Almaden Genomics and Accelerated Discovery team.

- Automated the development environment setup using Ansible and Minikube and reduced its resources usage by over 35 GB of memory.
- Developed AppScan cron jobs that periodically analyze potential risks in the code running on clusters and deliver notifications using Slack for all findings.
- Eliminated the CI/CD pipeline dependencies, which minimized all microservices' build and deployment time.
- Set up Sysdig Alerts and integrated them with Slack to get notified of any potential problems happening on the cluster.
- Setup Sysdig Alerts and integrate them with Slack to get notified of any potential problems happening on the cluster.
- Created new microservice using Helm charts and python that run huge-files copy jobs from IBM Cloud Object Storage to S3FS volumes upon deployment.
- Did a vast code refactoring starting with withdrawing hard-coded credentials mentioned during development and build time and utilizing Helm Subcharts for Stateful microservices like Postgres DB, Redis, and RabbitMQ.

FIND ME ONLINE

Website
www.ahmedjazzar.com

Github
[@ahmedaljazzar](https://github.com/ahmedaljazzar)

Linkedin
[@iamjazzar](https://www.linkedin.com/in/iamjazzar)

Twitter
[@iamjazzar](https://twitter.com/iamjazzar)

EDUCATION

MBA

Humphreys University

2023 - Ongoing

MS in Engineering Management

International Technological University

2018 - 2019

GPA
3.53 / 4.0

BS in Computer Science

University of Jordan

2011 - 2015

GPA
3.59 / 4.0

A certificate in Computer Science

Ibn Sina School for Computer Science

2012 - 2014

GPA
3.3 / 4.0

PUBLICATIONS

Detecting Graph Symmetries

University of Michigan / Ibn Sina School for Computer Science

Supervised by Professor Karem Sakallah

2012

<https://www.ahmedjazzar.com/assets/detecting-graph-symmetries/paper.pdf>

The goal of this project was to develop a computer program for detecting symmetries in vertex-colored undirected graphs.

Senior Software Engineer

[Appsembler](#)

📅 07/2019 - 11/2021 📍 San Jose

An experiential learning platform lets you deliver Open edX courses and virtual IT Labs to make online training more immersive.

- Developed a tool that exports, imports, and deletes database objects in a relational database cluster while maintaining objects' integrity.
- Built an in-cloud development toolkit, helping the team delegate 100% of their code to cloud VMs using Shell scripts and Google Cloud Platform APIs.
- Automated the process of creating micro-services across the whole team by developing a shell script that creates a starter project and deploys its infrastructure using Python, GCP, Django, Terraform, and GitHub Actions.
- Built the CI/CD workflow from scratch using tools Like GitHub Actions, Terraform Cloud, and Google App Engine.
- Built a product that tracks our Cloud spend and integrated it with Slack to keep the stakeholders up-to-date with their cloud spending.
- Developed an off-boarding pipeline using Python and Ansible.
- Revamped the Learning Labs to serve a Next.js frontend.

Senior Software Engineer

[ClearCare Online](#)

📅 05/2019 - 07/2019 📍 San Francisco

Home care software solutions for agencies.

- Migrated the existing 40% of the monolithic Django/ReactJS application to a distributed systems serverless architecture on AWS.
- Increased the efficiency of the API calls and database querying by remodeling the data structure.
- Took critical decisions in architecting, designing and developing Serverless system in 3 tiers.
- Worked on building ReactJS components and linking them with the serverless backend.
- Built scalable systems that handles hundreds of thousands of requests per second with intuitive interfaces and GraphQL APIs.

Senior Software Engineer

[OpenCraft](#)

📅 07/2018 - 11/2018 📍 San Jose, CA

Hosts and delivers online courses on the Open edX platform.

- Worked with a B2B organization on gathering business requirements from different business and setting plans and roadmaps for each project.
- Active contributor to more than five open-source projects.
- Developed Python and Django Web Framework solutions to meet different business needs.

Senior Software Engineer & Privacy Owner

[Edraak.org](#)

📅 01/2017 - 07/2018 📍 Amman, Jordan

Edraak is a massive open online course (MOOC) platform that is an initiative of the Queen Rania Foundation (QRF).

- Scaled the technology up to handle over 2 million requests a minute.
- Built internal Users Management Solutions with the marketing team which reduced the cost of using third-party services by 99% (\$5000-\$20).
- Developed an internal A/B testing tool that fits our business needs using Redis and Django and highlights the most requested metrics with a \$0 running cost.
- Wrote our first privacy policy that complies with GDPR and Turkey's DPL after extensive meetings with the dev, the lawyers, and the business departments.
- Conducted three Design Sprints with Google.org to build an educational app for students in 1st to 4th grade in the Arab region.
- Developed Edraak's first Search Engine that leverages machine learning to deliver user-specific results using Elastic Search, TensorFlow, and Python.
- Developed and designed learning interventions and early course completion predictions model running experiments on 500,000+ learners with a 0.87 AUC.
- Optimized database queries and code complexity using Django ORM and MySQL queries which reduced the computation time from 6 hours to 30 seconds.
- Introduced new documents bucketing approach for our MongoDB collections that speed up the documents' lookup by more than 80% across databases.
- Customized edX App to build Edraak's first iOS application that served more than 100,000 users on iOS.
- Led the technical efforts of the team on developing Edraak's K-12 online platform that currently serves more than 35,000 school students for 12 sprints.

Data Compression: Theory and Demonstration

[Massachusetts Institute of Technology / Ibn Sina School for Computer Science](#)

Supervised by Professor Munther Dahleh

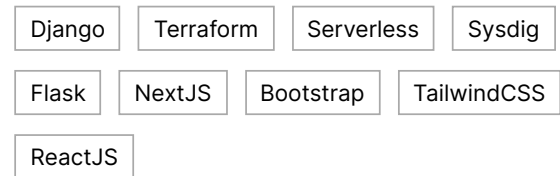
📅 2013

🔗 <https://www.ahmedjazzar.com/assets/data-compression/paper.pdf>

Explored the foundations of data compression using elements from information theory. The project is broken down into four milestones that lead us through understanding the various components of Data Compression.

SKILLS

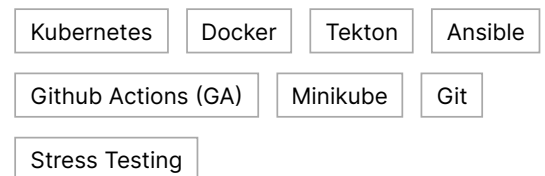
Frameworks



Languages



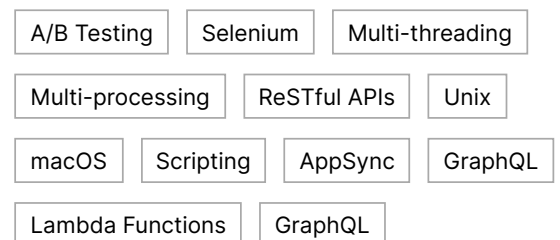
DevOps Skills



Templating Languages



Programming Skills



EXPERIENCE

Junior Software Engineer

[Edraak.org](#)

📅 08/2015 - 12/2016 📍 Amman, Jordan

Company Description

- Launched Edraak Research platform (ReachJS/Django) allowing researchers in the MENA region to design better targeted educational research.
- Helped instructors Leveraging educational data to create useful course materials and to support under-performing learners.
- Developed a Video Processor pipeline using AWS Notifications, Lambda, and Elastic Transcoder with building a custom YouTube uploader.
- Customized edX App to build Edraak's first Android mobile app to serve 13K user/month.
- Contributed substantial changes to edX Android App to support analytics and tracking services to suit critical business needs.
- Contributed 150+ change, released to ~1M learner, to the Edraak edX platform and its systems.

Intern Software Engineer

[Edraak.org](#)

📅 05/2015 - 08/2015 📍 Amman, Jordan

Company Description

- Built Edraak's website SEO solution on Django to rank us in the first position after years of being in the second page.
- Integrated and built Edraak's blog using WordPress, which currently contains 190K views, 75+ posts, and 865+ comments.
- Contributed 50+ change, released to ~500K learner, to the Edraak edX platform and systems.
- Built a translation pipeline that works with different text sources and formats after working on internationalizing and localizing the platform.

VOLUNTEERING

Global Shaper

[World Economic Forum](#)

📅 2016 - 2021

The Global Shapers Community is a network of young people driving dialogue, action and change.

Local Organizer

[Global Goals Jam](#)

📅 2017

A two-day event consisting of short design sprints. Creative teams of designers, developers, and Jammers from the local community.

Program Developer

[King Abdullah II Fund for Development](#)

📅 2014 - 2014

KAFD aims to support the Jordanian community by driving human and infrastructure development.

ACHIEVEMENTS



Best m-Government Service Award

Honored in the World Government Summit by Sheikh Mohammed bin Rashid Al Maktoum.



A Scholarship towards a Computer Science Bachelors Degree

Honored by the ministry of Education and Higher Education in Palestine.

SKILLS

Cloud Providers

Amazon Web Services (AWS)

IBM Cloud

Google Cloud Platform (GCP)

Databases

MySQL

PostgreSQL

MongoDB

DynamoDB

Memcached

SQLite

Methodologies

TDD

Agile

Scrum

Kanban

Waterfall

Google Cloud Platform Skills

APIs & Services

Compute Engine

Kubernetes Engine

Cloud Functions

Container Registry

App Engine

Cloud Run

Storage

Cloud Scheduler

Cloud Tasks

Amazon Web Services Skills

Lambda

S3

IAM

RDS

SNS

Route53

EC2

IoT

CloudWatch

CloudFront

IBM Cloud Skills

Toolchains

Secrets Manager

Kubernetes Service

Cloud Monitoring

Cloud Schematics

Object Storage

IDEs & Text Editors

PyCharm

Eclipse

NetBeans

Atom

Sublime Text

Android Studio

Xcode

Visual Studio Code

OPEN SOURCE PROJECTS

[arabic-nlp](#)

The Arabic NLP Library for Python.

[Sultan](#)

An Open edX Remote Devstack by Appsembler

[django-flapjacks](#)

A Django project that automates the process of transcoding videos on the cloud and uploading them to Youtube.

[dispatch-workflow](#)

A github Action that triggers a workflow in another (or same) repository and waits for the job to finish.

[rosetta](#)

Android library for multi-language support

[django-versatileimagefield \(Contributor\)](#)

Fixed issues with WebP image processing.

[django-mako](#)

The first simple, elegant Mako library for Django.

[saleor-helm](#)

A Kubernetes Helm repo for Saleor

[gestore](#)

A set of tools that will help you to manage Django object in the database.

[quran](#)

A modular, high performance, headless Quran platform built with Python, Rest, Django, and React.

SKILLS

Soft & hard

Leadership

Innovation

Networking

Team Leadership

Decision-Making

People Management

CERTIFICATION

[Oracle Certified Associate, Java SE 7 Programmer](#)

Oracle

[App Design and Development for iOS](#)

Coursera – University of Toronto

[Introduction To Swift Programming](#)

Coursera – University of Toronto