Zuhair AlSader

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EXPERIENCE

Software Engineer, Devzero.io   4/2024 – Now
- Integrated **Rook Ceph** storage system into Devzero workspaces replacing AWS EBS, EFS and S3, & **reducing storage costs by 60%**
- Introduced **OpenFGA** with **Tailscale's network acls** to control access to resources allowing the company to **serve enterprise customers.**

Cloud Storage Engineer, Koor.tech   11/2022 – 4/2024
- **Provided customer support** for Rook Ceph storage clusters.
- Developed a **data control center** for Rook using Protobuf and Nuxt
- Built **a Kubernetes operator** to simplify running Rook.
- **Wrote tutorials** about using Rook Ceph, and integrating with **Knative**

Storage Software Engineer, Seagate   11/2021 – 11/2022
Lead a team of 3 to design and test a C/C++ library that integrates Intel's **DAOS NVMe storage engine** with **Ceph**'s Rados and **Seagate's CORTX** to support **Amazon's S3 API**. This makes it easier for S3 users to adopt DAOS and CORTX in a **flexible unified open-source** storage system.

Software Engineer, Tophatter   6/2021 – 11/2021
Used Ruby on Rails, ReactJS and React Native to introduce a new **tiktok-style video feed** and AB-test it, **improving revenue** by 13%

Software Engineer, Jerry.ai   6/2020 – 5/2021
- Used ReactJS and GraphQL to **improve CRM** for sales agents serving 200k+ users **reducing user processing time** by 20%.
- Moved legacy code from Kubernetes to **Serverless architecture**, improving scalability and code maintainability through **a monorepo**.

Research Assistant, University of Waterloo   9/2017 – 6/2020
- **Lead Research in distributed systems**, message queues and MPI. Experience with Kafka, RabbitMQ, Pulsar, ActiveMQ, Redis and others
- Teaching assistant for: Distributed systems and Operating Systems

Lead Software Engineer, Endeavor Technology
Nablus, Palestine, endeavorpal.com;   6/2015 – 8/2017
Lead a team of 4 to develop a **web and mobile application** integrated with social media, SMS, and payment APIs. Used by 100+ customers.

EDUCATION

Masters in Computer Science; *University of Waterloo, Canada*
Supervisors: Samer Al-Kiswany and Tim Brecht   2017 – 2020
Waterloo Advanced Systems Lab & Systems and Networking Group
Thesis: **Optimizing MPI Collective Operations for Cloud Deployments**
GPA: 90.50% (A+)

BSc in Computer Engineering; *An-Najah National University*
Nablus, Palestine;   **GPA: 3.76/4 with Honor**   2012 – 2016

PUBLICATIONS & WORKSHOPS

Storage in Containers for Containers: an introduction to Rook Ceph,
Ceph Days Vancouver, June 2023 https://youtu.be/yLw9MwJgmfA

COOL: A Cloud-Optimized Structure for MPI Collective Operations,
 M. Alfatafta, Z. AlSader, S. Al-Kiswany, IEEE International Conference on Cloud Computing (CLOUD), 2018

SKILLS

Programming Languages:
Go, Python, C, C++, Ruby, JavaScript (+ TypeScript), Bash

Storage technologies: Rook, Ceph, Amazon S3 API, Intel DAOS, Seagate CORTX, Minio

Web development: Django, OpenAPI, Protobuf, Ruby on Rails, NodeJS, GraphQL, PostgresQL

Systems: Kubernetes, K8s operators, Kata containers OpenFGA, Tailscale, Headscale, Serverless architecture, message-oriented middleware, linux cluster management, distributed and parallel systems, software-defined networking, system design and evaluation, systems security

Other: Fast learner, team player, agile development, Writing docs and blog posts, team management, git, Continuous Integration (CI/CD), gitops, Github Actions

BLOG POSTS

Running Serverless ML With Knative And Ceph

Serverless Storage With Knative And Ceph

If You Run Ceph With Only 3 Nodes, You Are Asking For Trouble

LANGUAGES

Arabic: Native
English: Fluent (TOEFL iBT 108)

CLASSES

Advanced Distributed Systems, Empirical System Evaluation, Empirical Software Evolution, Randomized Algorithms, Quantum Algorithms, Quantum Information Processing, Quantum Error Correction