Zuhair AlSader

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Cloud-native software engineer with 9+ years of experience in distributed systems, storage infra, and backend development. **Rook & Ceph** expert. Skilled in **Kubernetes, Golang, Python, C++, and DevOps** tools with a strong academic background and published research.

EXPERIENCE

Software Engineer, Devzero.io 4/2024 – 5/2025
- **Cut storage costs by 60%** by integrating **Rook Ceph** storage system into Devzero workspaces using **terraform, helm, Kubernetes Python API & Rook-Ceph APIs**, replacing AWS EBS, EFS and S3
- Introduced **OpenFGA** with **Tailscale's network acls** to control access to resources allowing the company to **serve enterprise customers.**
- Handled **infrastructure migrations** & incidents quickly and efficiently.
- Added new features to Backend APIs using **Golang with MongoDB**

Cloud Storage Engineer, Koor.tech 11/2022 – 4/2024
- **Provided customer support** for Rook Ceph storage clusters.
- Built a **K8s operator** with **Go** and Kubebuilder to simplify running Rook.
- Developed a **data control center** for Rook with **Go**, Protobuf and Nuxt
- **Wrote tutorials** about using Rook Ceph, and integrating with **Knative** increasing community engagement.

Storage Software Engineer, Seagate 11/2021 – 11/2022
Led a team of 3 to design and test a **C/C++** library integrating **DAOS** with **Ceph RGW** to support **Amazon's S3 API** enabling seamless migration for enterprise users. Code merged into Ceph and DAOS upstream code.

Software Engineer, Jerry.ai 6/2020 – 10/2021
- Used ReactJS and GraphQL to **improve CRM** for sales agents serving 200k+ users **reducing user processing time** by 20%.
- Migrated legacy code from monolithic to **Serverless architecture**, improving scalability and code maintainability

Research Assistant, University of Waterloo 9/2017 – 6/2020
Led Research in distributed systems, message queues and MPI. Experience with Kafka, RabbitMQ, Pulsar, ActiveMQ, Redis and others

Lead Software Engineer, Endeavor Technology 6/2015 – 8/2017
Led a team of 4 to develop a marketing **web and mobile application** integrated with social media, SMS, and payment APIs using PHP

EDUCATION

***Masters in Computer Science**; University of Waterloo, Canada*
GPA: 90.50% (A+) 9/2017 – 1/2020
Waterloo Advanced systems Lab and Systems and Networking Lab
Thesis: **Optimizing MPI Collective Operations for Cloud Deployments**

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 2018, DOI: 10.1109/CLOUD.2018.00102

SKILLS

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

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

Cloud Technologies: AWS, Kubernetes, K8s operators, Kube Builder, Kata containers, OpenFGA, Tailscale, Headscale, Terraform, Serverless architecture

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

Systems: linux cluster management, message-oriented middleware, distributed and parallel systems, software-defined networking, system design and evaluation, systems security

Ops: git, gitops, Continuous Integration (CI/CD), Github Actions

Soft Skills: Fast learner, team player, agile, deep & fast research, writing docs and blog posts, team management

Languages: Arabic, English

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

CLASSES

Advanced Distributed Systems, Empirical System Evaluation, Empirical Software Evolution