

KARTHIK NEDUNCHEZHIAN

A full stack developer who always loves to keep the mind occupied. I love the way that programming teaches me how to think. I like to engage myself in an environment where I can learn something new each day and solve interesting problems.

EXPERIENCE

Zoho Corporation, Chennai — Zoho Catalyst - Zoho's serverless platform

Aug 2018 - PRESENT [35 Months]

- ❖ Researched, Designed, and Developed own on-demand secure, distributed, fault-tolerant sandbox as a service system from scratch which is the engine for Zoho Catalyst cloud functions and services. This system can efficiently handle thousands of untrusted workloads and spin fresh sandbox under 250ms (cold start). Designed orchestration layer using Go and Sandbox engine using Rust. Developed the GitLab CI/CD automatic test & deploy environment from scratch. Written the end-to-end integration testing and functional testing.
- ❖ Maintained over 50+ production servers across multiple data centers (IDCs).
- ❖ Developed various monitoring and analytics solutions using Prometheus and Grafana.
- ❖ Developed full fledged production solutions using Kubernetes and Docker.
- ❖ Trained multiple resources and mentored a couple of sub-teams.
- ❖ Developed a query layer for Zoho Catalyst datastore using GraphQL.
- ❖ Maintainer of Zoho Catalyst cloud function's Node.js runtime.
- ❖ Maintainer of Zoho Catalyst Javascript client SDK.
- ❖ Worked on the Zoho Catalyst front end design and development.

Zoho Corporation, Chennai — Zoho CRM - Server Team

MAY 2018 - JUL 2018 [3 Months]

- ❖ Maintained and Improved the Zoho CRM sales inbox backend system.
- ❖ Research on GraphQL implementation and design principles.

Zoho Corporation, Chennai — Intern

JAN 2018 - APR 2018 [4 Months]

- ❖ Designed and Developed a distributed backend system to process and store the huge mail metadata of Zoho CRM sales inbox.
- ❖ Implemented the Java client library for Zookeeper and Hbase-Hadoop APIs.

EDUCATION

Anna University, Chennai (India) — Electronics & Instrumentation

APR 2014 - APR 2018

Bharath Montessori, Tenkasi (India) — Biology

Academic Year 2011 - 2014

High School studies focused on Mathematics & Biology "10th-90%, 12th-85%". Member of the school basketball and athletics team.

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SKILLS

Distributed Systems | Cloud & Serverless Computing | Rust-lang | Node.JS | Java | Kubernetes | Docker | Virtualization | Containerization | System Programming | Gitlab CI/CD | DevOps | Jest | Git | Open-source contributor | Virtual-machines

SELECTED OPEN-SOURCE CONTRIBUTIONS

[Firecracker-microvm: virtualization technology for serverless computing.](#)

[Rust-vmm/event-manager: I/O notifier wrapper around linux epoll.](#)

[Rust-vmm/vmm-sys-util: helpers and utils used by various VMM.](#)

[Neonmoe/minreq: simple, minimal-dependency rust HTTP client.](#)

SELECTED PERSONAL PROJECTS

[Image Mimic Genetic Algorithm: This unsupervised genetic algorithm I have created will try to mimic the target image.](#) Source-code: [here](#)

[2048 Bot: Solves the 2048 game using the min-max algorithm and iterative deepening for efficiency.](#)

PROFILES

[LinkedIn](#) | [Github](#) | [HackerEarth](#) |

[HackerRank](#)