Jacky Zhao

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Experience

Rhizome
Independent Studio Practice
`05/2022-present`

Independent research studio focused on enabling data-neutrality on the web through creating a peer-to-peer protocol focused on live collaboration, data interoperability, and identity.

Produced several technical artifacts like a Raft consensus algorithm implementation and a Byzantine Fault Tolerant JSON CRDT.

Technologies: Rust, IPFS

Verses
Technical Lead
`11/2021-05/2022`

Led engineering for pluriverse.world and interdependence.online artifacts, building technical infrastructure to support over **10,000+** signatures across both.

Developed an open source package for versioned permaweb document management on Arweave and a GitHub action to automatically persist documents to Arweave.

Technologies: Vercel, GitHub Actions, Node.js, TypeScript, Arweave

Microsoft
Garage SWE Intern
`06/2021-09/2021`

Built a video streaming extension for Microsoft Teams, enabling non-technical content creators to stream content to Twitch, YouTube, and Facebook. Shipped as of 03/31/22.

Technologies: TypeScript, GraphQL, Jest, Teams SDK, Azure DevOps

Hootsuite
SWE Intern
`05/2020-09/2020`
`07/2019-09/2019`

Reduced mean time-to-acknowledge for alerts by a factor of **4x** by adding alerting and monitoring for key SLOs around **5** core tier one services.

Implemented a proof-of-concept service mesh to break a monolith service into more maintainable microservices. Proposal accepted to the company technical roadmap for 2023.

Technologies: AWS, Grafana, Prometheus, Terraform, JavaScript, React, Jest, Scala, Go, Docker, Envoy, Istio

BentoML
Open Source Contributor
`06/2020-07/2021`

Implemented CLI command to containerize BentoML machine learning models, reducing dependence on external tool workflows (#847, #884).

Proposed (#1540), implemented, and tested a distributed application-level locking module to allow multiple concurrent operations on models (#1541, #1567).

Reduced Docker image size by **60%** to enable lighter deployments for model server (#822).

Technologies: Docker, PyTest, Python, Kubernetes, Helm

nwPlus
Co-President
`09/2019-04/2022`

Elected to lead and coordinate **7** subteams with a total of **48** team members to run **3** of the largest hackathons in Western Canada, reaching over **2000+** students.

Led logistics for HackCamp, a beginner-focused virtual hackathon, attracting over **500+** attendees, **3,200+** livestream viewers, and **$1200** in donations to local charities.

Technologies: JavaScript, GoLang, GitBook, Firebase, React, Github Actions

Projects

Quartz
github (frontend)
github (scraper)

Website generator that allows users to host digital gardens for free. Built a custom Markdown parser to enable full-text search, backlinks, local graph view, and link previews. Created a strong community with **1300+** stars on GitHub, **900+** forks, and **33** unique contributors. Forks average over **100,000+** total monthly active visitors.

Technologies: GoLang, JavaScript, Hugo, GitHub Actions

Portal
github
producthunt

Created an open-source command-line tool for efficient peer-to-peer encrypted folder syncing. Currently has **800+** installations.

Technologies: React, TypeScript, Hypercore, xo, ava

readAR
github
devpost

Built an AR app to help those with learning disabilities by adding context-dependent word definitions and images to text with ambiguous meaning. Awarded: Microsoft Hack for Social Good Prize at Stanford's TreeHacks 2020 (**Top 2%**).

Technologies: PyTorch, Flask, Azure, Docker, Python

School

University of British Columbia
`Expected Grad: 05/2023`
`GPA: 4.0`

Bachelor of Science in Computer Science, Minor in Philosophy

Dean's Honour List. Received the Trek Excellence Scholarship (Top 5%) and the Dean of Science Scholarship (Top 1%).