Peijun Ma

peijun.ma@pm.me | (647) 809-5248 | https://www.linkedin.com/in/peijun-ma/ | https://peijun.dev

Skills

Technology

Expert

I am able to onboard new team members with these technologies:
Go, Scala, Python, Docker, Terraform, Google Cloud Platform, Linux, CircleCI

Proficient

I am able to be immediately productive with these technologies:
Clojure, AWS, Kubernetes, TypeScript, Angular, Java, Jenkins

Familiar

I am able to pick up these technologies relativity quickly:
Haskell, Rust, Vue.js, C#, AWS, C, React, Next.js

Other

- Designing and developing distributed systems
- Architecting software systems using domain-driven and service oriented principles
- Developing continuous deployment workflows to Kubernetes in a production environment
- Administrating Unix-like operating systems, have knowledge of the OSI network model
- Writing technical documentation and producing infrastructure diagrams
- Solid understanding of data structures and algorithms
- Knowledgeable in agile (XP, Kanban, and Scrum)

Experience

CircleCI

Software Engineer | June 2021 – Present

- Improved API coherency and tolerance of external faults by designing and implementing an **anti-corruption layer**
- Reduced observability costs by **25%** while preserving ability to diagnose issues by auditing and consolidating usage of spans
- Increased customer engagement for self-hosted runner product by designing runner APIs and UIs
- Improved reliability for **80%** of customer jobs by designing and implementing the deprecation of legacy services
- Reduced storage costs by **50%** by designing and implementing customer configurable storage retentions
- Improved software delivery confidence by designing comprehensive **end-to-end testing** framework

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Garner Distributed Workflow

Software Engineer | November 2018 – April 2021

- Improved software delivery speed and consistency by implementing the **GitOps** process using **ArgoCD**
- Increased horizontal scalability of the production system by 30% by migrating the system to **Kubernetes**
- Granted the ability to improve the production infrastructure to the dev team by developing infrastructure as code project using **Terraform**
- Optimized the performance of graph DB queries by 2000x by reducing the runtime complexity of result parsing from $\mathcal{O}(n^3)$ to $\mathcal{O}(n \log n)$
- Improved the maintainability of the codebase by championing **functional programming** with weekly study sessions
- Reduced CI costs by **60%** by migrating from Jenkins to Google Cloud Build

Projects

Personal website — Open Source project

`https://gitlab.otonokizaka.moe/Umi/peijun.dev`

- Built a personal website using **Vue.js**
- Published the website as a **Docker** image using GitLab CI
- Deployed the website automatically using **GitLab CI**

Cloudflare DDNS — Open Source project

`https://github.com/MaT1g3R/cloudflare-ddns`

- Purposed Cloudflare's DNS service as dynamic DNS using **Terraform**

Office hour scheduler — Open Source project

`https://github.com/office-hour-scheduler/ohs`

- Collaborated with several other developers to build a webapp for scheduling office hours with professors
- Designed the backend using **domain-driven** design principles
- Implemented the backend API using **GraphQL**
- Built the artifact as a Docker image in CI

Option (Python Library) — Open Source project

`https://github.com/MaT1g3R/option`

- Implemented a library to bring Rust-like Optional types to Python
- Integrated automated testing and deployment using Travis CI and codecov
- Published the library automatically to PyPi using the CI pipeline

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Chat bot — Open Source project

`https://github.com/MaT1g3R/YasenBaka`

- Created a chat bot serving 1000+ chat rooms at its peak
- Explored asynchronous programming using the **asyncio** library
- Deployed the application using Docker to **AWS**

Music player — Open Source project

`https://github.com/MaT1g3R/musicview`

- Designed a music player that discovers the least played songs for the user
- Created a simple UI using ncurses
- Synchronized between different threads using locks and condition variables

ext2 file system — Course project, University of Toronto

- Implemented a ext2 file system from scratch using C
- Debugged the program using GDB, valgrind, and CLion
- Experimented with the CMake build system

Education

University of Toronto — September 2016 – June 2021

Honours Bachelor of Science, **Computer Science Specialist**