

# HASYIMI BAHRUDIN

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Senior backend engineer with over 10 years experience, with over 5 years of experience working remotely.  
Interested in building distributed systems. I am also obsessed with writing readable and testable code.

## WORK EXPERIENCE

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### Beam

Kuala Lumpur, Malaysia (Remote)

*Senior Software Engineer I (Data Platform)*

October 2022 - Present

- Changed team to explore data engineering and analytics
- Rollout Argo Workflow to replace Zapier for business automation, reducing operational cost by 85%
- Work closely with operation teams around the world to empower business decisions with data

*Senior Software Engineer I (Vehicles)*

May 2021 - September 2022

- Moved to the vehicles team after reorganization. Work on backend projects related to vehicle IOT. Mostly in Go.
- Built an IOT simulator, which allows the team to test our services without requiring physical IOT
- Helped to reduce 70% of unnecessary database writes, which was causing frequent downtime due to database bloat
- Lead the microservice e2e testing project, which helped to improve developer confidence and productivity as we transition towards microservices. Most breaking changes are now caught before they get merged to master.
- Helped to write a query translator for translating Postgresql to BigQuery SQL, which is helping our transition to BigQuery as data lake

*Senior Software Engineer I (Product)*

July 2020 - May 2021

- Worked as full stack engineer, writing mostly Typescript (Node.js for backend, React Native for frontend)
- Helped roll out 3DS payment in Malaysia, which improved add card success rate for Malaysia from 60% to 80%
- Optimized PostGIS queries to take advantage of geospatial indexing, which reduced latency and database CPU usage
- Implemented OpenAPI to improve API documentation and programmability, which improved developer experience

### Pollen

Kuala Lumpur, Malaysia (Remote)

*Senior Software Engineer*

January 2020 - May 2020

- I was part of the pioneer engineers for a small pre-seed startup, writing mostly Typescript
- Helped the team to adopt Docker for local development, which improved engineer workflow
- Mentored junior engineers through PR reviews

### Perlin

Singapore (Remote)

*Core Engineer*

August 2019 - January 2020

- I was part of the core team that was implementing the Wavelet distributed consensus protocol
- Replaced usage of LevelDB with Badger, which reduced write latency by 10x.
- Optimized memory usage when syncing state.
- Wrote a lot of tests, which increased test coverage from 40% to 70%

### Self-employed

Kuala Lumpur, Malaysia (Remote)

*Freelance Developer*

August 2018 - July 2019

- Took a short break from working with startups
- Worked on a few freelance projects

**KATSANA**  
*Full Stack Developer*

Kuala Lumpur, Malaysia  
2016 - 2018

- I was part of a team of full stack developers. Used mostly PHP (Laravel).
- I led the project of building an in-house IOT server using Go, replacing an open-source server. This improved the overall performance of the product, and also gives us more control on how the server works.
- Helped the team to revamp their dashboard to use WebSocket instead of polling, which improved overall performance

**Terato Tech**  
*Games Programmer*

Bangi, Malaysia  
2012 - 2015

- I was part of a small team of mobile game developers. Used mostly C++ (cocos2dx).
- Built a pseudo-3D game engine (a-la F-Zero) for a mobile badminton game.
- Built a mobile game, which is a fusion of tower defense and mining (Minecraft) game. Not published.
- Built an online card collecting mobile game for the Japanese market (similar to Fantastica) with a team of 1 game producer, 2 programmers, and 3 game artists. Not published.

## EDUCATION

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**Georgia Institute of Technology**  
MS Computer Science *GPA: (3.8)*

Georgia, Atlanta  
Fall 2019 - Spring 2023 (expected to graduate May 2023)

**Limkokwing University**  
BS Games Technology *GPA: 3.8*

Cyberjaya, Malaysia  
2008 - 2011

## SKILLS

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Programming Languages: Go, Java, Python, C++, C

Areas of interest: Distributed computing, High performance computing, Compilers

## OPEN SOURCE CONTRIBUTIONS

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**LLVM C++** [reviews.llvm.org/people/commits/22060/](https://reviews.llvm.org/people/commits/22060/)  
Casual contributor to LLVM as an effort to improve my compilers knowledge.

**Distributed 2D tiled engine Javascript** [github.com/hasyimibhar/voffice-crdt](https://github.com/hasyimibhar/voffice-crdt)  
Proof of concept for a distributed 2D tiled engine (virtual office) built on top of CRDT (yjs).

## PERSONAL INTERESTS

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### Mechanical keyboards

I own a split hand ergonomic keyboard, which I hand-wired myself.

### Coffee

I brew my own coffee (V60, espresso). Recently started roasting my own beans too.

### Guitar

I started playing guitar in 2020. I mostly play bossa nova on a classical guitar.

### Digital gardening

I recently started digital gardening. You can read my notes at <https://hasyimibahrudin.com>.