

Peh Hoe Khim Marcus

+65-97768352 • hkmpeh@gmail.com • linkedin.com/in/marcuspeh • marcuspeh.github.io

Performance-driven Software Engineer with experience in designing, developing, and deploying robust software solutions. Skilled in problem-solving and time management, with a strong focus on delivering high-quality results.

WORK EXPERIENCES

TikTok, Backend Software Engineer **Apr 2024 - Present**

- Reduced metric monitoring time from 3 PD to 0 PD by unifying data platform systems
- Worked on real-time system for delivering data to TikTok live streamers
- Improved workflows for data metrics by streamlining search functionality based on user feedback

ByteDance, Backend Software Engineering Intern **Aug 2023 – Dec 2023**

- Enhanced approval process efficiency by integrating in-house solution
- Contributed to channel platform with monthly transactions exceeding USD \$7.5 billion
- Improved performance of channels rating API by over 90% through effective optimization strategies

Google, Software Engineering Intern **May 2023 - Aug 2023**

- Improved onboarding verification flow on Google Pay's merchant app (Android)
- Optimized QR code loading time by 93.5% (from 1.38s to 0.09s) through elimination of RPC calls
- Lowered proximity verification range by 99.5% from 2km to 10m by leveraging Bluetooth Low Energy

National University of Singapore, Teaching Assistant **Jan 2021 - May 2023**

- Led more than 60 students towards active learning of Computer Science modules
- Mentored students by providing apt feedback to queries and assignments
- Taught Programming Methodologies, Data Structures & Algorithms and Software Engineering modules

GovTech, Software Engineering Intern **May 2022 - Jul 2022, Dec 2022 - Jan 2023**

- Reduced loading time of web page by 10% by removing unnecessary API calls
- Strengthened security by implementing Two-Factor Authentication
- Improved server query response time under load by 200x through API restructuring

Reluvate Technologies, Software Engineering Intern **Nov 2021 - Jan 2022**

- Developed end-to-end web applications to host AI and automation solutions
- Designed and implemented backend APIs for a multinational real estate company
- Constructed Optical Character Recognition (OCR) to process pdf with more than 95% accuracy

EDUCATION

Master of Science in Computer Science **Aug 2024 – Present**

Georgia Institute of Technology

Bachelor of Computing in Computer Science (Honors) **Aug 2020 – Jan 2024**

National University of Singapore

GPA: 4.78 / 5.00 (Highest Distinction)

PROJECTS

Markeet - Point of Sales (github.com/marcuspeh/markeet)

- Built a web-based Point-Of-Sales system to targets SMEs and customers using *MongoDB, ExpressJs, ReactJs* and *Node.js (MERN)*
- Employed comprehensive end-to-end testing of primary user flows with *Cypress*

Around the World in \$80 - Expense splitting (github.com/marcuspeh/Around_The_World_In_80)

- Targets pain point of group travelers in splitting bills
- Use various software design pattern such as "command pattern" and "model, view, controller"
- Programmed in *Java* using *JavaFx* Library with 90% code coverage

Authentication Boilerplate - Simplifying personal projects (github.com/marcuspeh/auth-boilerplate)

- Created boilerplate for projects involving authentication
- Utilized *RSA* encryption for transmitting sensitive information
- Tested extensively using *Jest*

Peh Hoe Khim Marcus

+65-97768352 • hkmpeh@gmail.com • linkedin.com/in/marcuspeh • marcuspeh.github.io

EXTRA-CURRICULA EXPERIENCE

OGP's Build for Good 2023 Hackathon

Jun 2023

- Engineered user-friendly solution for simplifying medical health reports for general public
- Talked to domain experts and stakeholders for gathering essential requirements
- Pitched to ministers and other government officials

Google's internal HelloAI Hackathon

Jun 2023

- Built LLM prototype for more inclusive search results, incorporating diverse cultural perspectives
- Pitched the AI solution, showcasing strong communication and presentation skills
- Ranked among the top 10 teams, demonstrating teamwork and excellence in problem-solving

GIC's Code to Impact 2022 Hackathon

Sep 2022

- Delivered an instrument tracking web application catered to business
- Added extra features such as cross checking of data and logging system
- Spearheaded team of 5 to win 2nd runner up

SKILLS & CERTIFICATIONS

- **Programming Languages:** Python, C++, Go, JavaScript, TypeScript, Java, SQL, Dart
- **Libraries & Frameworks:** ReactJs, NextJs, Flutter, React Native, Android
- **Databases:** Postgres, SQLite, MongoDB
- **Tools:** Figma, Heroku, Vercel, Unix, Git, AWS
- **Soft Skills:** Leadership, Problem Solving, Teamwork, Independent
- **Certification:** AWS Solution Architecture Associate