

# Peh Hoe Khim Marcus

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Performance-driven Computer Science undergraduate at National University of Singapore, with experience in Agile Software Development. Possess strong problem-solving and time management skills.

## EDUCATION

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### National University of Singapore (NUS) Aug 2020 - Present

- Bachelor of Computing in Computer Science (Honors)
- Expected Date of Graduation: Dec 2023
- CAP: 4.76/5.00 (Highest Distinction)

## WORK AND INTERSHIP EXPERIENCES

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### Bytedance, Backend Software Engineering Intern Aug 2023 - Present

- 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 55% through effective concurrency strategies

### Roboto Coding Academy, Coding Instructor Jul 2020 - Present

- Administered coding lessons for kids from age of 5 to 15 to ignite interest in coding
- Curated curriculum in Python, Html etc.
- Taught in coding centres and schools such as Victoria School and Chung Cheng High School

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

- 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
- Ranked among top 10 teams in a Google internal AI hackathon

### 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

## PROJECTS

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### Markeet - Point of Sales ([github.com/marcuspeh/markeet](https://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)*
- Competed in the NUS Orbital Software Development Program to achieve Artemis (Distinction)
- 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](https://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

### MediClear - Simplifying medical reports ([github.com/marcuspeh/MediClear](https://github.com/marcuspeh/MediClear))

- Addressed common pain point by simplifying medical jargon in health reports
- Implemented PDF report parsing to extract and process essential health information
- Leveraged Large Language Model (LLM) and customized data processing techniques to enhance accuracy and usability of health report data

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## EXTRA-CURRICULA EXPERIENCE

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### OGP's Build for Good 2023 Hackathon

Jun 2022

- 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

### JPM's Code for Good 2022 Hackathon

Oct 2022

- Built prototype for social good organization (SG Assist) to better serve constituents
- Consolidated ideas to formulate product features
- Streamline process of application for support / grant

### 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 2<sup>nd</sup> runner up

## ADDITIONAL INFORMATION

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- **Programming Languages:** Python, C++, Go, JavaScript, TypeScript, Java, C, SQL, Dart
- **Libraries & Frameworks:** ReactJs, NextJs, Django, 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