Ming Chong **Lim**

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Education

Carnegie Mellon University — *Pittsburgh, PA*

Master of Science in Machine Learning — *Dec 2024*

- **GPA:** 4.07/4.00
- **Relevant coursework:** 10-617 Intermediate Deep Learning, 10-715 Advanced Introduction to Machine Learning, 10-725 Convex Optimization (*also served as a teaching assistant*), 36-705 Intermediate Statistics, 15-642 Machine Learning Systems, 16-726 Learning-Based Image Synthesis, 16-720 Computer Vision, 10-708 Probabilistic Graphical Models, 10-718 Machine Learning in Practice

National University of Singapore — *Singapore*

Bachelor of Computing in Computer Science with Honours — *Aug 2023*

- **GPA:** 4.88/5.00 (3.92/4.00). **Dean's list:** AY2021/2022 Semester 1 and AY2020/2021 Semester 1
- **Top student for 3 modules:** CS4243 Computer Vision and Pattern Recognition among 156 students, CS2103T Software Engineering among 338 students, and CS2106 Introduction to Operating Systems among 403 students
- **Teaching assistant:** CS2109S Introduction to AI and Machine Learning, CS2040S Data Structures and Algorithms, CS2103T Software Engineering, CS2106 Introduction to Operating Systems, CS2030 Programming Methodology II, CS3241 Computer Graphics
- Nominated for teaching awards by 9 students

Work Experience

DRW — *Singapore*

Quantitative Developer Intern — *May 2024 - Aug 2024*

- Parallelized several parts of a Python code base used to support Quantitative Researchers, increasing scalability and reducing latency by 30%
- Found and fixed a high-latency-impact, low-reproducibility bug that occurred in production
- Developed a framework for regression testing and reproducing production bugs in a semi-realistic setting

Defence Science and Technology Agency — *Singapore*

Software Engineer Intern — *Jan 2023 - Jun 2023*

- Optimized a C++ drone tracking software by rewriting and parallelising the code base with the help of profiling tools, speeding it up by 50%
- Extended a large open-source drone control software, QGroundControl, to link with existing company software and to achieve custom fine-grained control over the company's drones, ultimately realizing a production-ready solution

Samsung SDS — *Seoul, South Korea*

Machine Learning Intern — *Jun 2022 - Aug 2022*

- Developed containerized desktop and web based visualization software using Kivy and Vue.js respectively
- Integrated various image and voice Deepfake detection models into the software, visualizing their gradient-weighted class activation mapping, enhancing the explainability of the team's artificial intelligence products

Honors & Awards

2022	**1st Place**, Meta Global Hackathon, 3255 participants	*Virtual*
2021	**1st Place**, Citi HackOverflow	*Singapore*
2020	**2nd Place**, BrainHack Today I Learned	*Singapore*

Projects

RouteMaker [link]

Front-end Developer — *Apr 2021 - Sep 2021*

- Developed the front-end for a cross-platform application that uses machine learning to facilitate the creation and sharing of climbing routes

EzEDS [link]

Arduino Developer — *Dec 2019 - Feb 2020*

- Built a public transport card top-up machine to equip learners at the Down Syndrome Association (Singapore) with independent living skills
- Received sponsorship offers from 3 social service agencies to support the machine's further development

Research

VisualWebArena [link]

Co-author

- A benchmark for evaluating multimodal web agents on realistic visually grounded tasks

Skills

Programming Languages	Python, Java, C/C++, Javascript/Typescript
Frameworks	JavaFX, React, Vue.js, Ionic, Kivy, JQuery, HTML5, CSS3/SCSS
Machine Learning + Tools	PyTorch, TensorFlow, Scikit-Learn, OpenCV, NumPy, Pandas, Polars, PostgreSQL, Docker, Git, Regex