Jia Peng Lim

jiapeng.lim.2021@phdcs.smu.edu.sg |LinkedIn | Google Scholar

Singaporean Citizen, Singapore

Summary

Research Experience of 4 years, involved ideating and executing Artificial Intelligence (AI) research projects, including research on Large Language Models. I use Python, C++, Java and Machine Learning frameworks like PyTorch to prototype and pursue research objectives, which led to the publishing of first-author research papers in Top AI conferences such as ACL, EMNLP, and NeurIPS.

Education

Ph.D. Computer Science, Singapore Management University   08/2021 – 05/2026 (Expected)

   AISG Research PhD Fellowship Award (2023 – 2025)

   Singapore Data Science Consortium Dissertation Research Fellowship (2023)

   SMU Presidential Doctoral Fellowship (2023 – 2025)

   Dean's List (2024)

BSc Information Systems, Singapore Management University   08/2017 – 05/2021

   cGPA: 4.00/4.00, Summa Cum Laude

   PayPal Fintech Scholarship (2018 – 2021)

   Dean's List (2018, 2019, 2020)

   Top First Year Information Systems Student (2018)

Publications

A Partition Cover Approach to Tokenization, *NeurIPS 2025 (to appear)* [link]
   Jia Peng Lim, Shawn Tan, Davin Choo, and Hady W. Lauw

Interpreting Topic Models in Byte-Pair Encoding Space, *COLING 2025* [link]
   Jia Peng Lim and Hady W. Lauw

Aligning Human and Computational Coherence Evaluations, *CL Journal 2024* [link].
   Jia Peng Lim and Hady W. Lauw

Disentangling Transformer Language Models as Superposed Topic Models, *EMNLP 2023 (Main)* [link]
   Jia Peng Lim and Hady W. Lauw

Large-Scale Correlation Analysis of Automated Metrics for Topic Models, *ACL 2023 (Main)* [link]
   Jia Peng Lim and Hady W. Lauw

Towards Reinterpreting Neural Topic Models via Composite Activations, *EMNLP 2022 (Main)* [link]
   Jia Peng Lim and Hady W. Lauw

Work Experience

AI Robotics Intern, Bosch Digital Innovation, Singapore   08/2025 – Current

Proposed and developed an automated approach to build a multi-modal knowledge graph, extracting information from images using traditional and deep learning/GenAI computer vision techniques (OpenCV, PyTorch), in the context of augmenting spatial information fed to fixed-armed robots for manufacturing automation.

Data Engineering Intern, Lucence, Singapore   05/2020 – 08/2020

Build serverless Extra, Transform, Load (ETL) pipelines and applications hosted on Amazon Web Services, to curate and serve customized data requirements for organizational research needs in bio-technology space.

Software Engineering Intern, PayPal, Singapore   05/2019 – 08/2019

Research, designed and implemented a Java library on Conflict-free Replicated Data Types. The subsequent code went into production, assisting in the organization's goal of full active-active redundancy.

Community Service

Senior Teaching Assistant for Undergraduate Courses   Current

1. Smart-City Operations Research
2. Managing Customer Relations in Asia

Instructor for IMDA-Google AI Accelerator   06/2025

Served as one of the instructors in a team that taught high school students about AI (Computer Vision) using Python and PyTorch during a one-week intensive bootcamp in the Summer of 2025. Using a novel dataset provided by sponsors, I also designed a final project problem, which the students worked on for a week before their final presentation.

Conference Organizing Committee

Served as the aide-de-camp to the programme chair of ACM Web Search and Data Mining (WSDM) 2023 and TheWebConf (WWW) 2024.