# CONTACT

xurong.liang@uq.edu.au

xurong-liang

0000-0002-3458-3887

xurong-liang

xurong-liang.github.io

+1 518 249 5995

+61 405 053 886

78 Staff House Road, University of Queensland, St Lucia, QLD 4072, AUSTRALIA

# RESEARCH

**Data Mining Data Science Natural Language Processing Recommender System** 

# LANGUAGES

#### **English**

Bilingual

High proficiency in reading and writing

#### Chinese

Mandarin Native Fluency

#### Chinese

Cantonese Native Fluency

# **XURONG (JASON) LIANG**

Ph.D. Student, Research Assistant & Teaching Assistant Computer Science

### **EDUCATION**

#### Doctor of Philosophy (Ph.D.) in Computer Science

2023 - 2026 (exp.)

University of Queensland, Australia

Ph.D. project Toward Memory-Efficient Recommender Systems Advised by Prof. Hongzhi Yin and Dr. Rocky Tong Chen.

# **Bachelor of Computer Science (Honors)**

2022

University of Queensland, Australia

Honors project PEP++: Improved Pruning-Based Embedding Dimension Optimization for Recommender Systems Advised by Dr. Rocky Tong Chen. Awarded an Honors Class I Degree (cumulative GPA 7.000/7.000).

#### **Bachelor of Computer Science** University of Queensland, Australia

**2019 — 2021** 

Graduated with cumulative GPA 6.792/7.000. Major in Data Science.

#### **High School Diploma** Indooroopilly State High School, Australia

2016 - 2018

Graduated with OP4 (Highest: 1, Lowest: 25).

# **PUBLICATIONS**

#### Lightweight Embeddings with Graph Rewiring for Collaborative Filtering

**TOIS '25** 

**Paper** 

Xurong Liang, Tong Chen, Wei Yuan, and Hongzhi Yin

#### Lightweight Embeddings for Graph Collaborative Filtering

**SIGIR '24** 

Paper, Code

Xurong Liang, Tong Chen, Lizhen Cui, Yang Wang, Meng Wang, and Hongzhi Yin

#### Hate Speech Detection with Generalizable Topicaware Fairness

**KDD '24** 

Paper, Code

Tong Chen, Danny Wang, Xurong Liang, Marten Risius, Gianluca Demartini and Hongzhi Yin

Learning Compact Compositional Embeddings via Regularized Pruning for Recommendation

ICDM '23

Paper, Code

**Xurong Liang**, Tong Chen, Quoc Viet Hung Nguyen, Jianxin Li, and Hongzhi Yin

# **ACHIEVEMENTS**

Dean's Commendation for Academic Excellence — Bachelor of Computer Science (Hons)

2022

University of Queensland, Australia

Awarded to students who obtained a grade point average of 6.60 or higher in single semester.

Dean's Commendation for Academic Excellence — Bachelor of Computer Science

2019 — Jul 2021

University of Queensland, Australia

Awarded to students who obtained a grade point average of 6.60 or higher in single semester.

**Cloud Computing INFS3208 Best Project Runner-up Award** 

2021

University of Queensland, Australia

Awarded for outstanding performance in INFS3208 Cloud Computing individual project competition 2021.

**Prentice Scholar 2020** 

2020

University of Queensland, Australia

Prentice Scholars are students whose academic performance sits within the top five percent of the undergraduate Computer Science and Information Technology cohort at The University of Queensland.

Subject Prize Award - Information Processing and Technology

2017

Indooroopilly State High School, Australia

Ranked 1st in the Information Processing and Technology course cohort.

# **SCHOLARSHIPS**

Australian Government Research Training Program (RTP) Scholarship

2023 — 2027

**Google Research Travel Scholarship** 

2024

**UQ International Onshore Merit Scholarship** 

2022

Winter Research Scholarship

2021

# ACADEMIC WORK EXPERIENCE

#### **Applied Scientist Internship**

Oct 2024 — May 2025

Amazon, Australia

Conducting research on the topic of *In-context Learning for Addressing User Cold-start in Sequential Recommenders* with the guidance from Dr. Julien Monteil, Dr. Vu Nguyen, Dr. Vuong Le and Dr. Paul Albert.

#### **Casual Teaching Assistant**

Feb 2022 — present

University of Queensland, Australia

Tutoring course **INFS7901 – Database Principles** in Semester 1 and **INFS3208/INFS7208 - Cloud Computing** in Semester 2 each year. Offering practical & tutorial sessions weekly and responsible for assignment and exam paper marking.

#### **Casual Research Assistant**

Sep 2021 — present

University of Queensland, Australia

Conducting research relevant experiments, data preprocessing, baseline testing and algorithm implementation in the field of **Explainable Recommender Systems**.

#### Winter Research Scholar

Jun 2021 — Jul 2021

University of Queensland, Australia

Dynamic Topic Modelling on Social Media — Utilizing Natural Language Processing (NLP) techniques to model and analyze the change of trending topics on social media in relation to COVID-19 throughout the first 100-day period since the virus emerged. Project conducted under the supervision of Prof. Zi (Helen) Huang and Dr. Rocky Tong Chen. Project result visualization available at https://topicvis.nifu.me/.

#### **Voluntary Teaching Assistant**

Dec 2019 — Jan 2020

Dalu Primary School (大 芦 小 学), Yulin, Guangxi 537000, China

Teaching English and Information Technology courses to elementary school students. In charge of homework materials organization and marking.

# SOCIAL WORK EXPERIENCE

#### Self-employed Courier Delivery Service Brisbane, QLD 4000, Australia

Dec 2020 — Feb 2021

Contracting last-mile delivery orders with courier providers such as  $1stEx^{\mathbb{R}}$  and CouriersPlease $^{\mathbb{R}}$  in particular regions around the Greater Brisbane Region.

Expo Helper Jul 2017

AAS Education & Student Services, Spring Hill, QLD 4000, Australia

Assisting prospective students in answering any inquiries regarding further studies abroad. Assisting in student recruitment and encouraging prospective genuine students to apply to the institute on-site.

#### Voluntary International Student Ambassador Indooroopilly State High School, Australia

Jan 2017

Assisting new students at International Student Orientation and providing school tours for visiting delegates.