

# LEI LI 李磊

✉ csleili@comp.hkbu.edu.hk · ☎ (+852) 3411-5019 · 🌐 lileipisces.github.io

📍 RM625, David C. Lam Building, 34 Renfrew Road, Kowloon Tong, Hong Kong, China

## 🔗 RESEARCH INTERESTS

Explainable Recommendation, Recommender Systems, Natural Language Processing, Bias & Fairness

## 🎓 EDUCATION

**Hong Kong Baptist University (HKBU)**, Hong Kong, China Aug. 2017 – Present

*Ph.D. Candidate* in Computer Science, expected Aug. 2022

*Thesis: Natural Language Explanation for Recommendations and Beyond*

**Shenzhen University (SZU)**, Shenzhen, China Sep. 2013 – Jun. 2017

*B.Eng.* in Computer Science & *B.Sc.* in Mathematics

\* *Selected by College of Computer Science and Software Engineering for a special program, where less than 30 students out of 60 successfully obtained the double degree*

## 👥 EXPERIENCES

**Department of Computer Science (CSD), HKBU**, Hong Kong, China Aug. 2017 – Present

*Ph.D. Student* Advisor: Dr. Li Chen, Mentors: Dr. Yongfeng Zhang & Dr. Ruihai Dong

- Research on explainable recommendation

- *Outcome:*

- Published 1 co-author paper on *User Survey on Explanation* at Frontiers in Big Data
- Published 1 co-author paper on *Visual Explanation Generation* at ACL'22
- Published 1 paper on *Explanation Ranking* at SIGIR'21 Resource
- Published 3 papers on *Natural Language Explanation Generation* at WWW'20 Demo & CIKM'20 & ACL'21
- Published 1 paper on *Context-aware Explanation* at JIIS
- Published 1 paper on *Context-aware Recommendation* at ICDE'19 Workshop

**Inspir.ai**, Beijing, China Jun. 2019 – Aug. 2019

*Intern* Mentor: Dr. Peng Peng

- Research on explaining the decision-making process of reinforcement learning (RL) agents

- Visualization of the replay data of a computer game StarCraft II

**Big Data Institute, SZU**, Shenzhen, China Jul. 2016 – Aug. 2017

*Undergraduate Research Assistant* Advisor: Dr. Weike Pan

- Research on recommendation algorithms, especially collaborative filtering and matrix factorization

- *Outcome:* published one paper on *Recommendation Algorithm* at ICWS'18

**Department of Computer Science, HKBU**, Hong Kong, China Mar. 2017 – Jun. 2017

*Research Exchange Student* Advisor: Dr. Li Chen

- Research on personality for recommender systems

**Suishou Technology**, Shenzhen, China Aug. 2016 – Nov. 2016

*Intern* Advisor: Dr. Weike Pan

- Utilize machine learning tools (Liblinear and XGBoost) to mine potential customers for personalized advertising

- *Outcome:* increased the company's revenue on financial products by 4 times

## PUBLICATIONS

---

- Zhirun Zhang, Li Chen, Tonglin Jiang<sup>✉</sup>, Yutong Li, **Lei Li**. Effects of Feature-based Explanation and Its Output Modality on User Satisfaction with Service Recommender Systems. *Frontiers in Big Data*, volume \*, pages \*-\*, 2022.
- Shijie Geng, Zuohui Fu, Yingqiang Ge, **Lei Li**, Gerard de Melo, Yongfeng Zhang. Improving Personalized Explanation Generation through Visualization. In: *Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (ACL'22)*, pages \*-\*, Dublin, Ireland, May 22–27, 2022.
- **Lei Li**, Yongfeng Zhang, Li Chen. Personalized Transformer for Explainable Recommendation. In: *Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics (ACL'21)*, pages 4947–4957, Online, Thailand, August 1–6, 2021. (**oral paper**)
- **Lei Li**, Yongfeng Zhang, Li Chen. EXTRA: Explanation Ranking Datasets for Explainable Recommendation. In: *Proceedings of the 44th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR'21 Resource)*, pages 2463–2469, Virtual Event, Canada, July 11–15, 2021.
- **Lei Li**, Li Chen, Ruihai Dong. CAESAR: Context-Aware Explanation based on Supervised Attention for Service Recommendations. *Journal of Intelligent Information Systems (JIIS)*, volume 57 (1), pages 147–170, August 2021.
- **Lei Li**, Yongfeng Zhang, Li Chen. Generate Neural Template Explanations for Recommendation. In: *Proceedings of the 29th ACM International Conference on Information & Knowledge Management (CIKM'20)*, pages 755–764, Virtual Event, Ireland, October 19–23, 2020.
- **Lei Li**, Li Chen, Yongfeng Zhang. Towards Controllable Explanation Generation for Recommender Systems via Neural Template. In: *Companion Proceedings of the 2020 World Wide Web Conference (WWW'20 Demo)*, pages 198–202, Taipei, Taiwan, April 20–24, 2020.
- **Lei Li**, Ruihai Dong, Li Chen. Context-aware Co-Attention Neural Network for Service Recommendations. In: *2019 IEEE 35th International Conference on Data Engineering Workshops (ICDE'19 Workshop)*, pages 201–208, Macao, China, April 8–12, 2019.
- **Lei Li**, Weike Pan<sup>✉</sup>, Li Chen, Zhong Ming<sup>✉</sup>. RLT: Residual-Loop Training in Collaborative Filtering for Combining Factorization and Global-Local Neighborhood. In: *2018 International Conference on Web Services (ICWS'18)*, pages 326–336, Seattle, USA, June 25–30, 2018.

✉ denotes corresponding author.

## PARTICIPATION IN PROPOSAL WRITING

---

- Research on Generating Explainable Serendipity-Oriented Recommendations based on Knowledge Graph
  - Principal Investigator: Dr. Li Chen
  - Funded by General Research Fund (GRF) in 2020
- Engaging the Audience with AI-powered News Chatbot
  - Principal Investigator: Dr. Li Chen
  - Funded by HKBU IRCMS Project in 2019

## TALKS

---

- Research Experience Sharing Nov. 11, 2021
  - CSD, HKBU
- How to Come up with Ideas and Do Research: Experience Sharing Oct. 19, 2021
  - COMP7160 Research Methods in Computer Science, CSD, HKBU

## ACADEMIC SERVICES

---

- *Program Committee Member*: RecSys'22, SAC'22 & SAC'21 RS Track
- *Reviewer*:
  - ACM Transactions on Information Systems (TOIS)
  - ACM Transactions on Interactive Intelligent Systems (TiiS)
  - IEEE Transactions on Big Data (TBD)
  - Neurocomputing (NEUCOM)
  - Knowledge-based Systems (KNOSYS)

– Journal of Intelligent Information Systems (JIIS)

- *External Reviewer*: SIGIR'21, WWW'21, WWW'19, ImpactRS'20, CARS'19
- *Student Volunteer*: EMNLP'19

## AWARDS & HONORS

---

- *RPg Performance Award*, CSD, HKBU Sep. 2021
- *Research Postgraduate Studentship*, HKBU Aug. 2017 – Aug. 2021
- *Student Travel Grant (Virtual)*, SIGIR'21 Jul. 2021
- *Research Excellence Award*, Postgraduate Research Symposium (PG Day), CSD, HKBU Jun. 2021
- *Student Travel Grant (Virtual)*, CIKM'20 Oct. 2020
- *Best Presentation Award*, Postgraduate Research Symposium (PG Day), CSD, HKBU Jun. 2020
- *Excellent Teaching Assistant Performance Award*, CSD, HKBU Jun. 2018 & 2019 & 2020
- *Teaching Assistant Performance Award*, CSD, HKBU Feb. 2020
- *Outstanding Graduate*, SZU Jun. 2017
- *Excellent Student of Academic Performance (The 2nd Prize)*, SZU Oct. 2016
- *Excellent Student Leader (The 2nd Prize)*, SZU Oct. 2015
- *Song Shan Hu Scholarship*, SZU Oct. 2014
- *National Motivational Scholarship*, SZU Oct. 2014

## IT SKILLS

---

- Programming language: Python, Java, Matlab, C++ (ordered by proficiency)
- Platform and tools: Linux, PyTorch, TensorFlow, L<sup>A</sup>T<sub>E</sub>X, Scikit-learn, MongoDB, Django, XGBoost, Lib-linear, Git

## MISCELLANEOUS

---

- Language: Mandarin (native), English (fluent)
- Google Scholar: citations (70+), h-index (5), h10-index (2)
- Github: stars (140+)

Last update: April 27, 2022