Meng-Chieh (Jeremy) Lee

CONTACT Information Website: https://mengchillee.github.io/ Google Scholar: https://bit.ly/3mDenyM +1-412-694-2276 mengchil@cs.cmu.edu

GitHub: https://github.com/mengchillee

EDUCATION

Carnegie Mellon University
Ph.D., Computer Science Department

Pittsburgh, PA Aug 2021 - Present

Advisors: Christos Faloutsos and Leman Akoglu

Carnegie Mellon University

Pittsburgh, PA

Research Scholar, Information Systems and Public Policy

Aug 2019 - Aug 2020

Advisors: Christos Faloutsos and Leman Akoglu

National Chiao Tung University
M.S., Computer Science and Engineering

Hsinchu, Taiwan July 2017 - July 2019

Advisor: Vincent S. Tseng

AWARDS AND GRANTS 2022 IEEE Visualization Conference (IEEE VIS)

Best Paper Honorable Mention

Oct 2022

2021 IEEE Visualization Conference (IEEE VIS)

Best Poster Honorable Mention

Oct 2021

AWS Cloud Credit for Research

\$19,000 AWS Credits, and my project Linear First is involved

Sept 2021

National Chiao Tung University

Dean's List Award

Feb 2019

REFEREED
PUBLICATIONS
UNDER REVIEW

1. Lee, M.C., Zhu, Q., Mavromatis, C., Han, Z., Adeshina, S., Ioannidis, V.N., Rangwala, H., Faloutsos, C., "HybGRAG: Hybrid Retrieval-Augmented Generation on Textual and Relational Knowledge Bases".

REFEREED PUBLICATIONS APPEARED

- Deforce, B., Lee, M.C., Baesens, B., Serral Asensio, E., Yoo, J., and Akoglu, L., "TSA on AutoPilot: Self-tuning Self-supervised Time Series Anomaly Detection". SIAM International Conference on Data Mining (SDM), 2025.
- 3. Lee, M.C., Shekhar, S., Yoo, J., and Faloutsos, C., "Discovery and Exploitation of Generalized Network Effects". *Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*, 2024.
- 4. Posam, L., Shekhar, S., **Lee, M.C.**, and Faloutsos, C., "DiffFind: Discovering Differential Equations from Time Series". *Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*, 2024.
- 5. Lee, M.C.*, Zhao, L.*, and Akoglu, L., "Descriptive Kernel Convolution Network with Improved Random Walk Kernel". ACM Web Conference (WWW), 2024.
- 6. Lee, M.C., Yu, H., Zhang, J., Ioannidis, V.N., Song, X., Adeshina, S., Zheng, D., and Faloutsos, C., "NetInfoF Framework: Measuring and Exploiting Network Usable Information". *International Conference on Learning Representations (ICLR)*, 2024. (Spotlight).

- Cazzolato, M., Vijayakumar, S., Lee, M.C., Vajiac, C., Park, N., Fidalgo, P., Traina, A., and Faloutsos, C., "CallMine: Fraud Detection and Visualization of Million-Scale Call Graphs". ACM International Conference on Information and Knowledge Management (CIKM), 2023.
- 8. Yoo, J.*, **Lee, M.C.***, Shekhar, S., and Faloutsos, C., "Less is More: SLIMG for Accurate, Robust, and Interpretable Graph Mining". *ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD)*, 2023.
- 9. Vajiac, C., **Lee, M.C.**, Kulshrestha, A., Levy, S., Park, N., Olligschlaeger, A., Jones, C., Rabbany, R., and Faloutsos, C., "DeltaShield: Information Theory for Human-Trafficking Detection". *ACM Transactions on Knowledge Discovery from Data (TKDD)*, 2023.
- Cazzolato, M., Vijayakumar, S., Zheng, X., Park, N., Lee, M.C., Chau, D.H., Fidalgo, P., Lages, B., Traina, A., and Faloutsos, C., "TGRAPP: Anomaly Detection and Visualization of Large-Scale Call Graphs". AAAI Conference on Artificial Intelligence (AAAI), 2023.
- 11. Cazzolato, M., Vijayakumar, S., Zheng, X., Park, N., **Lee, M.C.**, Fidalgo, P., Lages, B., Traina, A., and Faloutsos, C., "TgraphSpot: Fast and Effective Anomaly Detection for Time-Evolving Graphs". *IEEE International Conference on Big Data (BigData)*, 2022.
- 12. Vajiac, C., Chau, D.H., Olligschlaeger, A., Mackenzie, R., Nair, P., **Lee, M.C.**, Li, Y., Park, N., Rabbany, R., A., and Faloutsos, C., "TrafficVis: Visualizing Organized Activity and Spatio-Temporal Patterns for Detecting and Labeling Human Trafficking". *IEEE Visualization Conference (IEEE VIS)*, 2022. (Best Paper Honorable Mention)
- Nair, P., Li, Y., Vajiac, C., Olligschlaeger, A., Lee, M.C., Park, N., A., Chau, D.H., Faloutsos, C., and Rabbany, R., "VisPaD: Visualization and Pattern Discovery for Fighting Human Trafficking". ACM International World Wide Web Conference (WWW), 2021.
- 14. **Lee, M.C.***, Shekhar, S.*, Faloutsos, C., Hutson, T.N., and Lasemidis, L., "GEN²OUT: Detecting and Ranking Generalized Anomalies". *IEEE International Conference on Big Data (BigData)*, 2021.
- 15. Lee, M.C., Nguyen, H., Berberidis, D., Tseng, V.S., and Akoglu, L., "GAWD: Graph Anomaly Detection in Weighted Directed Graph Databases". *IEEE/ACM International Conference on Advances in Social Network Analysis and Mining (ASONAM)*, 2021.
- 16. Vajiac, C., Olligschlaeger, A., Li, Y., Nair, P., **Lee, M.C.**, Park, N., Rabbany, R., A., Chau, D.H., and Faloutsos, C., "TrafficVis: Fighting Human Trafficking through Visualization". *IEEE Visualization Conference (IEEE VIS)*, 2021. (Best Poster Honorable Mention)
- 17. Lee, M.C.*, Vajiac, C.*, Kulshrestha, A., Levy, S., Park, N., Jones, C., Rabbany, R., and Faloutsos, C., "InfoShield: Generalizable Information-Theoretic Human-Trafficking Detection". 37th IEEE International Conference on Data Engineering (ICDE), 2021.
- Lee, M.C., Zhao, Y., Wang, A., Liang, P.J., Akoglu, L., Tseng, V.S., and Faloutsos, C., "AUTOAUDIT: Mining Accounting and Time-Evolving Graphs". *IEEE International Conference on Big Data (BigData)*, 2020.
- 19. Lee, M.C., Huang, Y., Ying, J.J.C., Chen, C., and Tseng, V.S., "DeepIdentifier: A Deep Learning-Based Lightweight Approach for User Identity Recognition". 15th International Conference on Advanced Data Mining and Applications (ADMA), 2019, November.

20. Huang, Y., Lee, M.C., Tseng, V.S., Hsiao C.J. and Huang C.C., "Robust Sensor-based Human Activity Recognition with Snippet Consensus Neural Networks". 16th IEEE International Conference on Wearable and Implantable Body Sensor Networks (BSN), 2019.

IN THE NEWS INFOSHIELD for Human Trafficking Detection

May 2021

- WPXI
- CMU News

Work Experience Amazon Applied Scientist Intern Palo Alto, CA May 2024 - Aug 2024

Amazon

Applied Scientist Intern

Santa Clara, CA May 2023 - Aug 2023

Amazon

Applied Scientist Intern

East Palo Alto, CA May 2022 - Aug 2022

TEACHING EXPERIENCE CMU 11-868: Large Language Model Systems

ENCE Instructor: Lei Li

Spring 2024

CMU 15-883: Computational Models of Neural Systems

Instructor: David Touretzky

Fall 2023

Professional Services Session Chair

• KDD: 2023

Program Committee

• **SDM**: 2024

Conference Reviewer

ICLR: 2025IJCAI: 2024WWW: 2024

• KDD: 2022, 2023, 2024, 2025

• ECML-PKDD: 2023

• ICDE: 2023