

Curriculum Vitae

Name: Chua Tat-Seng (Email: dcscts@nus.edu.sg)

Current Positions:

- Professor, School of Computing, NUS
- Director, NExT Research Centre, NUS
- Distinguished Visiting Professor: Tsinghua Uni., Sichuan Uni., China

Awards:

- 2024: Fellow, Singapore National Academy of Science (SNAS)
- 2024: Overseas Outstanding Technical Contributions, China Computer Federation
- 2022: NUS Research Recognition Award, NUS.
- 2015: ACM SIGMM Technical Achievements Award, ACM.

Research Interests and Scientific Impact

- Research Interests: Multimodal Foundation Model, Trust and Safety in AI, Recommender Systems, Multimodal Conversational Systems, Fintech
- Scientific Impact: H-index= 146; Overall citation number= >107,000 (Google Scholars, Apr 2026)

Professional Contributions

- Chair of Steering Committee: Multimedia Modeling (MMM) conference series, and ACM International Conference on Multimedia Retrieval (ICMR) (2015-2018).
- General-Chair: ACM ICAIF 2025, TWC (WWW) 2024, ACM WSDM 2023, ACM MM-Asia 2020, ACM Web Science 2015, ACM SIGIR 2008, and ACM Multimedia 2005

Best Papers Awards (Selected, since 2023)

- 2025 Outstanding Paper, ICLR (Fang et al., AlphaEdit: Null-Space Constrained Knowledge Editing For Language Models, ICLR 2025)
- 2024 Best Paper Honorable Mention, ACM SIGIR (Xu et al., A Taxation Perspective for Fair Re-Ranking, SIGIR 2024)
- 2023 Frontier of Science Award, Int'l Conf. on Basic Sciences (Wang et al., KGAT: Knowledge Graph Attention Network for Recommendation, KDD 2019)

Keynote Talks (Selected, since 2022)

- Keynote: "Next Phase of Research on Multimodal Foundation Models", ACM Multimedia, Dublin, Ireland, Oct 2025.
- Keynote: "Advances in Multimodal Foundation Models and the Network of Expert". ChinaMM 2024, Yinchuan, China.
- Keynote: "Generative Recommendation: Towards Next-generation Recommender Paradigm". RecSys (Recommender Systems), Singapore, Sep 2023.
- Keynote: "Challenges in Multimodal Conversational Search and Recommendation". ACM ICMR, Newark, USA, Jul 2022.

Recent Significant Research Grants

- 2025-2028: Trustworthy Multimodal Foundation Models: A Scalable Multi-Agent Approach. Agency: NRF-IMDA, Singapore. Grant S\$4.9M.

- 2024-25: Enhancing Financial Investment Decision-making with Retrieval-augmented LLM. Agency: AIDF, Singapore. Grant: S\$500K
- 2021-23: Enhancing Financial Investment Decision-making with Retrieval-augmented Large Language Models. Company: Huawei. Grant: S\$888K.
- 2021-23: Learning & Reasoning on Knowledge Graph-Enhanced Info Retrieval. Agency: DSTA. Grant: S\$750K
- 2021-23: Sea-NExT Joint Lab. Company: Sea Group. Grant: S\$2M.
- 2015-18: NExT++: Towards Web Intelligence and User Empowerment. Agency: NRF Singapore. Grant: S\$12M.

Co-Founder of Technology Start-up Companies

- ViSenze Pte Ltd (<https://www.visenze.com/>)
- 6Estates Pte Ltd (<https://www.6estates.com/>)

List of 12 Significant Publications

- 1) J Fang, H Jiang, K Wang, Y Ma, S Jie, X Wang, X He, TS Chua: Alpha-Edit: Null-space constrained knowledge editing for language models. **ICLR 2025. (*Outstanding Paper Award*) (Google Citations: 178)**
- 2) S Wu, H Fei, L Qu, W Ji, TS Chua: Next-GPT Any-to-any multimodal LLM, **ICML 2024. (Google Citations: 1,061)**
- 3) W Fan, Y Ding, L Ning, S Wang, H Li, D Yin, TS Chua, Q Li: A survey on RAG meeting LLMs: Towards retrieval-augmented large language models. **ACM SIGKDD 2024. (Google Citations: 1,297)**
- 4) J Xiao, X Shang, A Yao, TS Chua: Next-QA: Next phase of question-answering to explaining temporal actions, **CVPR 2021. (Google Citations: 843)**
- 5) X Wang, X He, Y Cao, M Liu, TS Chua. KGAT: Knowledge Graph Attention Network for Recommendation, **ACM SIGKDD 2019. (Best Fundamental Paper Award, China 2023) (Google Citations: 2,937)**
- 6) X Wang, X He, M Wang, F Feng, TS Chua. Neural graph collaborative filtering. **ACM SIGIR 2019. (Google Citations: 4,635)**
- 7) Q Sun, Y Liu, TS Chua, B Schiele. Meta-Transfer Learning for Few-Shot Learning, **IEEE CVPR 2019. (Google Citations: 1,747)**
- 8) X He, L Liao, H Zhang, L Nie, X Hu, TS Chua. Neural collaborative filtering. **WWW 2017. (Google Citations: 9,551)**
- 9) X He, TS Chua. Neural factorization machines for sparse predictive analytics. **ACM SIGIR 2017. (Google Citations: 1467)**
- 10) L Chen, H Zhang, J Xiao, L Nie, J Shao, W Liu, TS Chua. SCA-CNN: Spatial and channel-wise attention in convolutional networks for image captioning. **CVPR 2017. (Google Citations: 2,487)**
- 11) J Chen, H Zhang, X He, L Nie, W Liu, TS Chua. Attentive collaborative filtering: Multimedia recommendation with item-and component-level attention. **ACM SIGIR 2017. (Google Citations: 1,134)**
- 12) H Zhang, Z Kyaw, SF Chang, TS Chua. Visual translation embedding network for visual relation detection. **CVPR 2017. (Google Citations: 709)**