

Curriculum Vitae

Name: Chua Tat-Seng

Title: KITHCT Chair Professor

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Current Positions:

- co-Director, NEXT++ Research Centre, NUS
- KITHCT Chair Professor, School of Computing, NUS
- Distinguished Visiting Professor, Tsinghua University, China
- Pao Yue-Kung Chair Professor, Zhejiang University, China

Employment History:

- 2010 – Present: co-Director, NEXT++ Research Centre, NUS
- 2009 – Present: KITHCT Chair Professor, School of Computing, NUS
- 1998 – 2000: Acting Dean, School of Computing, NUS
- 1996 – 1998: Acting Head, Department of Information Systems & Computer Science, Faculty of Science, NUS
- 1996 – 2003: Associate Professor, School of Computing, NUS
- 1990 – 1996: Senior Lecturer, Dept of Info Systems & Computer Science, NUS
- 1988 – 1990: Research Staff member, Institute of Systems Science (now I2R)
- 1983 – 1988: Lecturer, Dept of Information Systems & Computer Science, NUS

Academic Qualifications:

- Feb 1983 - PhD (Computer Science), University of Leeds, UK
- Jun 1979 - BSc (Civil Engr & Computer Science), University of Leeds, UK

Research Interests:

- Multimedia information retrieval; social media analytics; video processing
- Scientific impact: H-index= >80; Overall citation number= >30,000 (based on Google Scholars, Nov 2020)

List of 5 Most Significant Publications

- Fuli Feng, Xiangnan He, Yiqun Liu, Liqiang Nie, and Tat-Seng Chua (2018). Learning on Partial-Order Hypergraphs. Proceedings of the 27th International Conference on World Wide Web (WWW 2018).

- Xiang Wang, Xiangnan He, Fuli Feng, Liqiang Nie, and Tat-Seng Chua (2018). TEM: Tree-enhanced Embedding Model for Explainable Recommendation. In Proceedings of the 27th International Conference on World Wide Web (WWW 2018).
- Xiangnan He and Tat-Seng Chua (2017). Neural Factorization Machines for Sparse Predictive Analytics. In Proceedings of the 40th International ACM SIGIR Conference on Research & Development in Information Retrieval (SIGIR 2017), pp. 355-364.
- Xiaochi Wei, Heyan Huang, Liqiang Nie, Hanwang Zhang, Xianling Mao, Tat-Seng Chua: I Know What You Want to Express: Sentence Element Inference by Incorporating External Knowledge Base. IEEE Trans. Knowl. Data Eng. 29(2): 344-358 (2017)
- Jingyuan Chen, Hanwang Zhang, Xiangnan He, Liqiang Nie, Wei Liu, Tat-Seng Chua: Attentive Collaborative Filtering: Multimedia Recommendation with Item- and Component-Level Attention. SIGIR 2017: 335-344

Patents Held:

- Automatic Frequently Asked Question Compilation from Community-based Question Answering Archive – Granted on 25 Nov 2014 (SG/US)
- In Video Product Annotation with Web Information Mining – Filed on 11 Apr 2012 (CN/SG/US)
- A Method and Apparatus for Tracking Microblog Messages for Relevancy to an Entity Identifiable by an Associated Text and an Image – Filed on 31 Jul 2014 (CN/SG/US)
- Methods, Apparatuses and Computer-Readable Mediums for Organizing Data Relating to a Product – Filed on 10 Oct 2014 (CN/SG/US)
- A Perpetually Automatic Image Annotation Agent - Filed on 11 Feb 2015 (SG/US)
- Neural Factorization Machines for Sparse Predictive Analytics – Filed on May 2017 (SG)
- Attentional Factorization Machines: Learning the Weight of Feature Interactions via Attention Networks – Filed on May 2017 (SG)
- Learning on Partial-Order Hypergraphs – Pending for Provisional Filing
- Tree-enhanced Embedding Model (TEM) – Pending for Provisional Filing

Scientific Awards

- ACM SIGMM Technical Achievement Award 2015 (for Outstanding Technical Contributions to Multimedia Computing, Communications and Applications)
- 2020 Best Paper Award, ACM Multimedia 2020 (Liang et al., PiRhDy: Learning Pitch-, Rhythm-, and Dynamics-aware Embeddings for Symbolic Music. Seattle, USA, Oct 2020)
- 2019 CSVT Transactions Best Paper Award, IEEE Trans on CSVT (26, 7, Jul 2016)
- 2018 Best Department Article Award, IEEE Multimedia (Cui, et al., Social Sensed Multimedia Computing, Jan 2016)
- 2016 Honorable Mention Award., ACM SIGIR' 2016 (Zhang et al., Discrete Collaborative Filtering, Pisa Italy, Jul 2016)
- 2015 IEEE Multimedia Best Paper Award, IEEE Multimedia Magazine (Hu et al., Towards Multi-Screen Social TV with Geolocation-Aware Social Sense, 31(3): 10-19, 2014)