

CV of Dr. Reynold C. K. Cheng: (No More than 3 pages)

1. Academic Qualification

- (1) PhD (2005), Computer Science, Purdue University, USA
- (2) MS (2003), Computer Science, Purdue University, USA
- (3) M.Phil.(2000), Computer Science, University of Hong Kong, Hong Kong
- (4) B. Eng. (1st Class Hon.; 1998), Computer Engineering, University of Hong Kong, Hong Kong

2. Positions Held (Chronological Order)

- (1) Associate Professor at the Department of Computer Science, University of Hong Kong
(Tenured, 2012-present)
- (2) Assistant Professor at the Department of Computer Science, University of Hong Kong
(Tenured, 2008-2012)
- (3) Assistant Professor at the Department of Computing, Hong Kong Polytechnic University (2005-2008)

3. Research Areas Related to Ocean Science, Technology and/or Policy

Dr. Cheng is a computer scientist and his research is focused on data engineering and data mining, including uncertain databases, sensor databases, and knowledge graph construction and analytics.

4. Funded Research Projects as Principal Investigator (PI), Co-PI or Co-Investigator (Co-I) over the Past 5 Years (Maximum 5 Projects):

Dr. Cheng has completed a number of externally funded research projects (total value > HK\$11 m) and trained 11 PhD and 13 MPhil students as well as 4 postdoctoral researchers. At present, he is conducting the following projects:

1. **PI** – *HINCare: A Heterogeneous Information Network for Elderly-Care Helper Recommendation* (Innovation and Technology Fund (ITF) – Midstream Research Programme for Universities (MRP), Ref: MRP/029/18, 2019-2021). Amount: HKD 4,066,400.
2. **MTRC collaboration core member** (with Prof. W.K. Li, B. Kao, P. Yu, and W. K. Kwan), for Proof-of-Concept of projects for Mass Transit Railway Corporation (MTRC), Hong Kong. Amount: HKD 2,000,000.

3. **Co-I** (PI: W. Lou) – Embrace My Age: A Partnered Solution for Better, Healthier, and Meaningful Ageing (Hong Kong Jockey Club Charity, 2019-2022). Amount: HKD 12.95M.
4. **PI** (Co-I: B. Cautis and S. Maniu) – *Discovering and Querying Meta-Graphs in Large Heterogeneous Information Networks* (RGC **GRF**, Ref: 17229116, 2016-18). Amount: HKD 675,647.
5. **PI** (Co-I: W. Fan and P. Senellart) – *Efficient Query Algorithms for Uncertain Graph Databases* (RGC **GRF**, Ref: 17205115, 2015-17). Amount: HKD 462,528.

5. Five Key Publications over the Past 5 Years (*Corresponding author)

1. S. Maniu, **R. Cheng***, and P. Senellart. An Indexing Framework for Queries on Probabilistic Graphs. In *ACM Transactions on Database Systems (TODS)*, 42(2), article 13, pp. 1-34, June 2017, ISSN: 0362-5915.
2. Z. Huang, Y. Zheng, **R. Cheng***, Y. Sun, N. Mamoulis, and X. Li. Meta Structure: Computing Relevance in Large Heterogeneous Information Networks. In the 22nd ACM SIGKDD Intl. Conf. on Knowledge Discovery and Data Mining (KDD 2016), San Francisco, US, August 2016.
3. Y. Fang, **R. Cheng***, S. Luo, and J. Hu. Effective Community Search for Large Attributed Graphs. In *Proceedings of the VLDB Endowment (PVLDB)*, 9(12), pp. 1233-1244, Aug 2016.
4. C. Meng, **R. Cheng***, S. Maniu, P. Senellart, and W. Zhang. Discovering Meta-Paths in Large Heterogeneous Information Networks. In the 24th Intl. World Wide Web Conf. (WWW 2015), Florence, Italy, May 2015.
5. S. Lei, S. Maniu, L. Mo, **R. Cheng***, and P. Senellart. *Online Influence Maximization*. In the 21th ACM SIGKDD Intl. Conf. on Knowledge Discovery and Data Mining (KDD 2015), Sydney, Australia, August 2015.

6. Awards and Recognition

1. Elected Fellow of Institute of Transport Studies, the University of Hong Kong, 2018.
2. Outstanding reviewer award, 35th IEEE Intl. Conf. on Data Engineering (IEEE ICDE 2019), Macau SAR, China, Apr 2019.
3. Recipient of Outstanding Young Researcher Award 2011-12, HKU
4. Recipient of U21 Fellowship 2011
5. 2010 Research Output Prize in HKU Computer Science
6. Performance Awards in Hong Kong Polytechnic University (2006 and 2007)