

HANG DONG

✉ hang.dong@ed.ac.uk · <http://cgi.csc.liv.ac.uk/~hang/> ·

RESEARCH AND EDUCATION

University of Edinburgh, Edinburgh, UK Oct 2019 – Present

Research Fellow Medical Informatics

- Clinical Natural Language Processing Research Group, University of Edinburgh

University of Liverpool, Liverpool, UK July 2015 – May 2020

PhD Computer Science

- Title: Learning and Leveraging Structured Knowledge from User Generated Social Media Data
- Research Area: Text Mining, Ontology Learning, Topic Modelling, Deep Learning
- Supervisors: Dr. Wei Wang, Prof. Frans Coenen, Prof. Kaizhu Huang

University of Sheffield, Sheffield, UK Sep 2013 – Jan 2015

MSc Information Systems

Wuhan University, Wuhan, China Sep 2009 – June 2013

BMgt Library Science

PROJECTS

Health Data Research UK Human Phenotype Project Oct 2019 – Apr 2022

Title: Deep Phenotyping of Disease Status Outcomes Derived from Linked Health Data.

Key participation as post-doctoral research fellow. Hosted by the University of Edinburgh.

Health Data Research UK National Text Analytics Implementation Project Oct 2019 – Apr 2022

Participation. Hosted by the University of Edinburgh.

Learning and Evolving Knowledge Structures from User Generated Social Media Data (PhD project) July 2015 – Oct 2018

Funded by Xi'an Jiaotong-Liverpool University Research Development Fund "RDF-14-01-10".

Genealogical Linked Data Application Development Apr 2016 – June 2016

The linked data project won the 1st prize of Shanghai Library Open Data Application Development Contest (top 1.7%), 20,000 RMB (about £2200+). Website: <http://pcrc.library.sh.cn/zt/opendata/2016/>

TEACHING EXPERIENCES

Xi'an Jiaotong-Liverpool University, Suzhou, China July 2015 – Jan 2019

Teaching Assistant Supporting Lab Sessions in Computer Science Modules

University of Liverpool, Liverpool, UK Jan 2017 – Apr 2017

Online Teaching Assistant "Communicating Research in the Sciences Online" for PGR students

KEY PUBLICATIONS

- H. Dong, Víctor Suárez-Paniagua, William Whiteley, Honghan Wu. Explainable Automated Coding of Clinical Notes using Hierarchical Label-wise Attention Networks and Label Embedding Initialisation, submitted to *Journal of Biomedical Informatics*, 2020, pp. 1-17 (suppl. pp. 1-3). arXiv:2010.15728.
- H. Dong, W. Wang, F. Coenen, K. Huang. Automated Social Text Annotation with Joint Multi-Label Attention Networks, *IEEE Transactions on Neural Networks and Learning Systems*, 2020, pp. 1-15.

- H. Dong, W. Wang, F. Coenen, K. Huang. Knowledge Base Enrichment by Relation Learning from Social Tagging Data, *Information Sciences, Volume 526*, 2020, pp. 203-220.
- H. Dong, W. Wang, F. Coenen, K. Huang. Joint Multi-Label Attention Networks for Social Text Annotation, in *Proceedings of the 2019 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT 2019), Volume 1 (Long and Short Papers)*, Minneapolis, USA, 2-7 June, 2019, pp. 1348-1354.
- J. Lee, S. Oh, H. Dong, F. Wang, G. Burnett. Motivations for Self-Archiving on an Academic Social Networking Site: A Study on ResearchGate. *Journal of the Association for Information Science and Technology, Volume 70*, 2019, pp. 563-574.
- H. Dong. Matching Linked Data for Cross-Lingual Genealogical Services: *Learn Chinese Surnames* in Shanghai Library Open Data Application Development Contest. *Journal of Academic Libraries [in Chinese]*, Volume 4, 2018, pp. 50-57+103.
- H. Dong, W. Wang, F. Coenen. Rules for Inducing Hierarchies from Social Tagging Data, in *iConference 2018*, Sheffield, UK, 25-28 March, 2018. Springer, Cham, pp. 345-355.
- H. Dong. Enrichment of Cross-Lingual Information on Chinese Genealogical Linked Data, in *iConference 2017*, Vol. 2, Wuhan, China, 22-25 March, 2017, pp. 31-42.
- H. Dong, W. Wang, and H.-N. Liang, Learning Structured Knowledge from Social Tagging Data: A Critical Review of Methods and Techniques, in *2015 IEEE International Conference on SocialCom*, Chengdu, China, 19-21 December, 2015, pp. 307-314.
- J. Lee, S. Oh, H. Dong, F. Wang, G. Burnett, A Framework for Studying Motivations for Self-archiving on Academic Social Network Sites, in *iConference 2017 Proceedings*, Wuhan, China, 22-25 March, 2017, pp. 684-687. (Poster paper)
- B. Yu, J. Lee, H. Dong. Health Information Seeking Behavior of Individuals with Hearing Loss in an Online Community, in *iConference 2016*, Philadelphia, Pennsylvania, USA, 20-23 March, 2016, pp. 1-4.

KEY PRESENTATIONS

- H. Dong, H. Wu, C. Sudlow. Initialising Label Embedding for Automated Medical Coding of Clinical Notes. *Healthcare Text Analytics Conference (HealTAC 2020)*, London, UK, online, 23 Apr 2020.
- H. Dong. Automatic Annotation of Documents Shared by Users: a Deep Learning Model Integrating Semantic Knowledge and Reading Behaviour. *The 3rd San Ren Xing Semantic Salon, Information Technology for Libraries (IT4L), "Artificial Intelligence in Libraries"* [in Chinese], Shanghai, China, 14 Aug 2019.
- H. Dong. iConference Doctoral Colloquium, Sheffield, UK, 25 Mar 2018.
- H. Dong. Linked Data Consumption and Application Development: a Case Study on the Genealogical Open Data from Shanghai Library. *The 13th Academic Digital Library Symposium (ADLS 2016)* [in Chinese], Shanghai Library, Shanghai, China, 6 Dec 2016.

AWARDS

<i>Wellcome Institutional Translation Partnership Award (£1000)</i> , Wellcome Trust	Oct 2020 – Nov 2020
<i>Research Scholarship</i> , Xi'an Jiaotong-Liverpool University	July 2015 – Oct 2018
<i>Outstanding Teaching Assistant Award (top 3%)</i> , Xi'an Jiaotong-Liverpool University	Sep 2017 – June 2018
<i>First Prize (top 1.7%)</i> , Shanghai Library Open Data Application Development Contest	June 2016
<i>Wuhan University Scholarship for Undergraduates (top 15%)</i> , Wuhan University	Sep 2010 – June 2012

SKILLS

- Programming and Visualisation: Python, Jupyter Notebook, Java, Matlab, Excel VBA.
- Artificial Intelligence: Pytorch, Tensorflow, SPARQL, Weka, MALLET.

LANGUAGE

- Chinese: Native language.
- English: Fluent English speaking and writing.
- French: Able to handle basic oral and writing communications.