

Fei Liu | Résumé

- The University of Melbourne
- Ph.D. Candidate (Natural Language Processing)
- Supervisors: Tim Baldwin, Trevor Cohn
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Education

The University of Melbourne <i>Doctor of Philosophy</i> Natural Language Processing, Deep Learning	Melbourne, Australia <i>Feb, 2015–Present</i>
The University of Melbourne <i>Master of Software Systems Engineering, First Class Honours</i>	Melbourne, Australia <i>July, 2012–July, 2013</i>
Beijing University of Technology <i>Bachelor of Computer Science and Technology</i>	Beijing, China <i>Sept, 2004–July, 2008</i>

Selected Publications

Fei Liu, Trevor Cohn, and Timothy Baldwin. Narrative Modeling with Memory Chains and Semantic Supervision. In *Proceedings of the 56th Annual Meeting of the Association for Computational Linguistics (ACL 2018)*, pages 278–284, Melbourne, Australia, 2018.

Fei Liu, Trevor Cohn, and Timothy Baldwin. Recurrent Entity Networks with Delayed Memory Update for Targeted Aspect-based Sentiment Analysis. In *Proceedings of the 2018 Conference of the North American Chapter of the Association for Computational Linguistics – Human Language Technologies (NAACL HLT 2018)*, pages 278–283, New Orleans, USA, 2018.

Fei Liu, Trevor Cohn, and Timothy Baldwin. Improving End-to-End Memory Networks with Unified Weight Tying. In *Proceedings of the 15th Annual Workshop of The Australasian Language Technology Association (ALTW 2017)*, pages 16–24, Brisbane, Australia, 2017. **Best Post Award**

Fei Liu, Timothy Baldwin, and Trevor Cohn. Capturing Long-range Contextual Dependencies with Memory-enhanced Conditional Random Fields. In *Proceedings of the 8th International Joint Conference on Natural Language Processing (IJCNLP 2017)*, pages 555–565, Taipei, Taiwan, 2017.

Fei Liu and Julien Perez. Gated End-to-End Memory Networks. In *Proceedings of the 15th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2017, also presented at NIPS 2016 Let's Discuss: Learning Methods for Dialogue workshop)*, pages 1–10, Valencia, Spain, 2017.

Fei Liu, Julien Perez, and Scott Nowson. A Language-independent and Compositional Model for Personality Trait Recognition from Short Texts. In *Proceedings of the 15th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2017)*, pages 754–764, Valencia, Spain, 2017.

Julien Perez and **Fei Liu**. Dialog State Tracking, A Machine Reading Approach using Memory

Network. In *Proceedings of the 15th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2017)*, pages 305–314, Valencia, Spain, 2017.

Fei Liu, Alistair Moffat, Timothy Baldwin, and Xiuzhen Zhang. Quit While Ahead: Evaluating Truncated Rankings. In *Proceedings of 39th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2016)*, pages 953–956, Pisa, Italy, 2016.

Fei Liu, Maria Vasardani, and Timothy Baldwin. Automatic Identification of Locative Expressions from Social Media Text: A Comparative Analysis. In *Proceedings of the 4th International Workshop on Location and the Web (LocWeb 2014)*, pages 9–16, Shanghai, China, 2014.

Awards and Additional Certificates

Best Poster Award <i>Australasian Language Technology Association</i>	Brisbane, Australia <i>Dec, 2017</i>
ALTA 2017 Student Scholarship <i>Australasian Language Technology Association</i>	Brisbane, Australia <i>Nov, 2017</i>
Google PhD Travel Scholarship Award <i>Google</i>	Melbourne, Australia <i>Oct, 2017</i>
Best Paper Award, 5th Annual Doctoral Colloquium <i>Sch. of Computing and Information Systems, The University of Melbourne</i>	Melbourne, Australia <i>July, 2017</i>
Conference Travel Scholarship <i>The University of Melbourne</i>	Melbourne, Australia <i>April, 2017</i>
Winning Team of Electronic Trading Challenge Hackathon <i>Jane Street Capital</i>	Melbourne, Australia <i>Mar, 2017</i>
Best Intern Presentation Award <i>Xerox Research Centre Europe</i>	Grenoble, France <i>Sept, 2016</i>
SIGIR Travel Scholarship <i>SIGIR</i>	Pisa, Italy <i>July, 2016</i>
3rd Prize, Microsoft Data Science Student Challenge Hackathon <i>Microsoft, The University of Melbourne</i>	Melbourne, Australia <i>May, 2016</i>
Australian Postgraduate Awards (APA Scholarship) <i>Department of Education, Australian Government</i>	Melbourne, Australia <i>Feb, 2015–Feb, 2019</i>
IELTS <i>General Training, Overall: 8.5/9.0</i> <i>Listening: 8.5/9.0, Reading: 9.0/9.0, Writing: 8.5/9.0, Speaking: 7.0/9.0</i>	Melbourne, Australia <i>Mar, 2013</i>
Oracle Certified Professional, Java SE 6 Programmer <i>Oracle Corporation</i>	Tokyo, Japan <i>Apr, 2011</i>
Japanese Language Proficiency Test, Level 1 (Top Level) <i>Japan Educational Exchanges and Services</i>	Tokyo, Japan <i>Dec, 2009</i>

Experience

The University of Melbourne <i>Research Assistant (Casual)</i>	Melbourne, Australia <i>May, 2017–Aug, 2017</i>
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Research Duties: Responsible for implementing a bi-directional LSTM-CRF model for sequential tagging tasks in low-resource languages for the DARPA-funded LORELEI project in collaboration with CMU.

Xerox Research Centre Europe

Grenoble, France

Research Intern

May, 2016–Oct, 2016

Research Topic and Achievements: Memory Networks, deep learning approach for personality trait recognition, 3 long conference papers accepted at EACL 2017

Royal Melbourne Institute of Technology

Melbourne, Australia

Research Assistant (Casual)

Sept, 2014–Feb, 2015

Detailed Achievements:

- Sept 2014 – Feb 2015 *Customized Search Engine for Industry Partner*
Managed to increase the accuracy of the query boundary detection process by 10% by applying machine learning techniques. Significantly improved the performance of the search engine (F-score from less than 10 to 55 by boosting precision substantially and factoring in translation probabilities to detect paraphrases).

The University of Melbourne

Melbourne, Australia

Research Assistant (Casual)

Sept, 2014–Dec, 2014

Hitachi Government & Public Corporation System Engineering, Ltd.

Tokyo, Japan

Software Engineer (Full-Time)

Oct, 2008–June, 2012

Internal Awards:

- Participated (as a core developer) in the development of the *GOOD-DESIGN-AWARD*-winning and *KIDS-DESIGN-AWARD*-winning web application named *ZoomSight* (No.1 in market share)

Hitachi Beijing Tech Information Systems Co.,Ltd

Beijing, China

Software Engineer (Intern)

Feb, 2008–Aug, 2008

Languages

<u>Name</u>	<u>Proficiency</u>
Chinese	Native or Bilingual Proficiency
English	Full Professional Proficiency
Japanese	Full Professional Proficiency

Programming Skills

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- Primary language: Python, Java
 - Knowledge of: TensorFlow, Keras, Theano, L^AT_EX, Linux
 - GitHub: <https://github.com/liuflly>