

# Fei Liu | Résumé

- The University of Melbourne
- Ph.D. Candidate (Natural Language Processing)
- Supervisors: Tim Baldwin, Trevor Cohn
- ✉ fliu3@student.unimelb.edu.au • 🌐 <https://liufly.github.io>

## Education

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

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<b>Best Poster Award</b> <i>Australasian Language Technology Association</i>	<b>Brisbane, Australia</b> <i>Dec, 2017</i>
<b>ALTA 2017 Student Scholarship</b> <i>Australasian Language Technology Association</i>	<b>Brisbane, Australia</b> <i>Nov, 2017</i>
<b>Google PhD Travel Scholarship Award</b> <i>Google</i>	<b>Melbourne, Australia</b> <i>Oct, 2017</i>
<b>Best Paper Award, 5th Annual Doctoral Colloquium</b> <i>Sch. of Computing and Information Systems, The University of Melbourne</i>	<b>Melbourne, Australia</b> <i>July, 2017</i>
<b>Conference Travel Scholarship</b> <i>The University of Melbourne</i>	<b>Melbourne, Australia</b> <i>April, 2017</i>
<b>Winning Team of Electronic Trading Challenge Hackathon</b> <i>Jane Street Capital</i>	<b>Melbourne, Australia</b> <i>Mar, 2017</i>
<b>Best Intern Presentation Award</b> <i>Xerox Research Centre Europe</i>	<b>Grenoble, France</b> <i>Sept, 2016</i>
<b>SIGIR Travel Scholarship</b> <i>SIGIR</i>	<b>Pisa, Italy</b> <i>July, 2016</i>
<b>3rd Prize, Microsoft Data Science Student Challenge Hackathon</b> <i>Microsoft, The University of Melbourne</i>	<b>Melbourne, Australia</b> <i>May, 2016</i>
<b>Australian Postgraduate Awards (APA Scholarship)</b> <i>Department of Education, Australian Government</i>	<b>Melbourne, Australia</b> <i>Feb, 2015–Feb, 2018</i>
<b>IELTS</b> <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>	<b>Melbourne, Australia</b> <i>Mar, 2013</i>
<b>Oracle Certified Professional, Java SE 6 Programmer</b> <i>Oracle Corporation</i>	<b>Tokyo, Japan</b> <i>Apr, 2011</i>
<b>Japanese Language Proficiency Test, Level 1 (Top Level)</b> <i>Japan Educational Exchanges and Services</i>	<b>Tokyo, Japan</b> <i>Dec, 2009</i>

## Experience

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<b>The University of Melbourne</b> <i>Research Assistant (Casual)</i>	<b>Melbourne, Australia</b> <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

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<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<sup>A</sup>T<sub>E</sub>X, Linux
  - GitHub: <https://github.com/liuflly>