

Fei Liu | Résumé

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

Education

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| The University of Melbourne <i>Doctor of Philosophy</i> Natural Language Processing, Deep Learning, Information Retrieval | 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> |

Publications

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

Fei Liu, Timothy Baldwin, and Trevor Cohn (to appear). Capturing Long-range Contextual Dependencies with Memory-enhanced Conditional Random Fields. In *In Proceedings of the 8th International Joint Conference on Natural Language Processing (IJCNLP 2017)*, 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, Julien Perez, and Scott Nowson. A Recurrent and Compositional Model for Personality Trait Recognition from Short Texts. In *Proceedings of the Workshop on Computational Modeling of People's Opinions, Personality, and Emotions in Social Media (PEOPLES)*, pages 20–29, Osaka, Japan, 2016.

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.

Andrei Shcherbakov, Ekaterina Vylomova, **Fei Liu**, and Timothy Baldwin. VectorWeavers at SemEval-2016 task 10: From incremental meaning to semantic unit (phrase by phrase). In *Proceedings of the 10th International Workshop on Semantic Evaluation (SemEval 2016)*, pages 871–877, San Diego, USA, 2016.

André Dittrich, Maria Vasardani, Stephan Winter, Timothy Baldwin, and **Fei Liu**. A Classification Schema for Fast Disambiguation of Spatial Prepositions. In *Proceedings of the 6th ACM SIGSPATIAL International Workshop on GeoStreaming (IWGS 2015)*, Seattle, USA, 2015.

Fei Liu, Afshin Rahimi, Bahar Salehi, Miji Choi, Ping Tan, and Long Duong. Automatic Identification of Expressions of Locations in Tweet Messages using Conditional Random Fields. In *Proceedings of the Australasian Language Technology Association Workshop 2014 (ALTW 2014)*, pages 171–176, Melbourne, Australia, 2014.

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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| 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, 2018</i> |
| IELTS <i>General Training, Overall: 8.5/9.0</i> | Melbourne, Australia <i>Mar, 2013</i> |

Listening: 8.5/9.0, Reading: 9.0/9.0, Writing: 8.5/9.0, Speaking: 7.0/9.0

Oracle Certified Professional, Java SE 6 Programmer

Oracle Corporation

Tokyo, Japan

Apr, 2011

Japanese Language Proficiency Test, Level 1 (Top Level)

Japan Educational Exchanges and Services

Tokyo, Japan

Dec, 2009

Experience

The University of Melbourne

Research Assistant (Casual)

Melbourne, Australia

May, 2017–Aug, 2017

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

Research Intern

Grenoble, France

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

Research Assistant (Casual)

Melbourne, Australia

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

Research Assistant (Casual)

Melbourne, Australia

Sept, 2014–Dec, 2014

Hitachi Government & Public Corporation System Engineering, Ltd.

Software Engineer (Full-Time)

Tokyo, Japan

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

Software Engineer (Intern)

Beijing, China

Feb, 2008–Aug, 2008

Languages

Name

Chinese

English

Japanese

Proficiency

Native or Bilingual Proficiency

Full Professional Proficiency

Full Professional Proficiency

Programming Skills

- Primary language: Python, Java
- Knowledge of: TensorFlow, Keras, Theano, \LaTeX , C/C++, JavaScript, jQuery, HTML, CSS, Linux, Struts, Spring, Hibernate
- GitHub: <https://github.com/liuflly>