Fei Liu | Resumé

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

The University of Melbourne — **Melbourne, Australia**
Doctor of Philosophy — *Feb, 2015–Present*
Natural Language Processing, Deep Learning, Information Retrieval

The University of Melbourne — **Melbourne, Australia**
Master of Software Systems Engineering, First Class Honours — *July, 2012–July, 2013*

Beijing University of Technology — **Beijing, China**
Bachelor of Computer Science and Technology — *Sept, 2004–July, 2008*

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.

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

ALTA 2017 Student Scholarship — **Brisbane, Australia**
Australasian Language Technology Association — *Nov, 2017*

Google PhD Travel Scholarship Award — **Melbourne, Australia**
Google — *Oct, 2017*

Best Paper Award, 5th Annual Doctoral Colloquium — **Melbourne, Australia**
Sch. of Computing and Information Systems, The University of Melbourne — *July, 2017*

Conference Travel Scholarship — **Melbourne, Australia**
The University of Melbourne — *April, 2017*

Winning Team of Electronic Trading Challenge Hackathon — **Melbourne, Australia**
Jane Street Capital — *Mar, 2017*

Best Intern Presentation Award — **Grenoble, France**
Xerox Research Centre Europe — *Sept, 2016*

SIGIR Travel Scholarship — **Pisa, Italy**
SIGIR — *July, 2016*

3rd Prize, Microsoft Data Science Student Challenge Hackathon — **Melbourne, Australia**
Microsoft, The University of Melbourne — *May, 2016*

Australian Postgraduate Awards (APA Scholarship) — **Melbourne, Australia**
Department of Education, Australian Government — *Feb, 2015–Feb, 2018*

IELTS — **Melbourne, Australia**
General Training, Overall: 8.5/9.0 — *Mar, 2013*
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 — **Tokyo, Japan**
Orcale Corporation — *Apr, 2011*

Japanese Language Proficiency Test, Level 1 (Top Level) **Tokyo, Japan**
Japan Educational Exchanges and Services *Dec, 2009*

Experience

The University of Melbourne **Melbourne, Australia**
Research Assistant (Casual) *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 **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 around 55 by boosting precision substantially and factoring in translation probabilities to detect paraphrases).
  - Java (Apache Lucene), 3k lines

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

Name	Proficiency
Chinese	Native or Bilingual Proficiency
English	Full Professional Proficiency
Japanese	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
- Development tools: Eclipse, SVN, Git, Browser Developer Tools

Misc

- GitHub repository: `https://github.com/liufly`