

# Fei Liu | Résumé

Ph.D. (Natural Language Processing, Deep Learning)  
Senior Research Scientist at Google DeepMind (Gemini)

Research experience at leading industry labs (Facebook AI Research and NAVER LABS)

✉ liufly@live.com • 🌐 <https://liufly.github.io>

## Experience

### Google DeepMind

Senior Research Scientist

Main Focus: Gemini, LLM, SFT, RL, agent, reasoning

Mountain View, CA, USA

May, 2020–Present

### Facebook AI Research

Research Intern

Research Topic and Achievements: Coreference resolution, memory-enhanced deep learning models, paper published at ACL 2019

Seattle, WA, USA

Sept, 2018–Jan, 2019

### Xerox Research Centre Europe (now NAVER LABS Europe)

Research Intern

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

Grenoble, France

May, 2016–Oct, 2016

## Selected Publications

**Fei Liu** as a core contributor, *et al.* Gemini: A Family of Highly Capable Multimodal Models. In Gemini technical report: <https://goo.gle/GeminiPaper> and arXiv: <https://arxiv.org/abs/2312.11805>, 2023.

Yuxia Wang, Minghan Wang, Muhammad Arslan Manzoor, **Fei Liu**, Georgi Georgiev, Rocktim Jyoti Das, Preslav Nakov. Factuality of large language models: A survey. In *Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing (EMNLP 2024)*, pages 19519–19529, Miami, USA, 2024.

William Held, Christopher Hidey, **Fei Liu**, Eric Zhu, Rahul Goel, Diyi Yang, and Rushin Shah. DAMP: Doubly Aligned Multilingual Parser for Task-Oriented Dialogue. In *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (ACL 2023)*, pages 3586–3604, Toronto, Canada, 2023.

Christopher Hidey, **Fei Liu**, Rahul Goel. Reducing Model Churn: Stable Re-training of Conversational Agents. In *Proceedings of the 23rd Annual Meeting of the Special Interest Group on Discourse and Dialogue (SIGDIAL 2022)*, pages 14–25, Edinburgh, UK, 2022. **Best Paper Award**

**Fei Liu**, Luke Zettlemoyer, and Jacob Eisenstein. The Referential Reader: A Recurrent Entity Network for Anaphora Resolution. In *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics (ACL 2019)*, pages 5918–5925, Florence, Italy, 2019.

Minghao Wu, **Fei Liu**, and Trevor Cohn. Evaluating the Utility of Hand-crafted Features in Sequence Labelling. In *Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing (EMNLP 2018)*, pages 2850–2856, Brussels, Belgium, 2018.

**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.

## Education

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

## Awards and Additional Certificates

<b>Best Paper Award</b> <i>Annual Meeting of the Special Interest Group on Discourse and Dialogue</i>	<b>Edinburgh, UK</b> Sept, 2022
--	------------------------------------

<b>Best Short Paper Award</b> <i>ACM SIGIR International Conference on the Theory of Information Retrieval</i>	<b>Tianjin, China</b> <i>Sept, 2018</i>
<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>ACM SIGIR Conference on Research and Development in Information Retrieval</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–May, 2019</i>

## Patents

---

Julien Perez, Scott Nowson, and **Fei Liu**. Author personality trait recognition from short texts with a deep compositional learning approach. US10049103B2 (granted).

## Languages

---

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

## Misc

---

- Google Scholar: <https://bit.ly/2TxSU7e>
- GitHub: <https://github.com/liuflly>