

Michiel de Jong | CV

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Education

- **University of Southern California**
PhD Candidate (GPA 4.0) 2018-present
- **Carnegie Mellon University**
Visiting Student (GPA 4.0) 2017-2018
- **Northwestern University**
PhD Candidate Economics (GPA 4.0) 2014–2016
- **University of Cambridge**
MPhil in Economic Research, Diploma in Economics (distinction) 2012-2014
- **Utrecht University**
Joint Honours BSc in Mathematics and Physics (cum laude) 2007-2011

Selected Publications

- **COLT5: Faster Long-Range Transformers with Conditional Computation.**
J. Ainslie, T. Lei, M. de Jong, S. Ontanon, S. Brahma, Y. Zemlyanskiy, D. Uthus, M. Guo, J. Lee-Thorpe, Y. Tay, Y. Sung, S. Sanghai. *arXiv preprint, 2023*
- **Pre-computed memory or on-the-fly encoding? A hybrid approach to retrieval augmentation makes the most of your compute.**
M. de Jong, Y. Zemlyanskiy, N. FitzGerald, J. Ainslie, S. Sanghai, F. Sha, W. Cohen. *arXiv preprint, 2023*
- **FiDO: Fusion-in-Decoder optimized for stronger performance and faster inference.**
M. de Jong, Y. Zemlyanskiy, J. Ainslie, N. FitzGerald, S. Sanghai, F. Sha, W. Cohen. *arXiv preprint, 2022*
- **QA Is the New KR: Question-Answer Pairs as Knowledge Bases.**
W. Chen, W. Cohen, M. de Jong, N. Gupta, A. Presta, P. Verga, J. Wieting. *AAAI, 2023*
- **Generate-and-Retrieve: Use Your Predictions to Improve Retrieval for Semantic Parsing.**
Y. Zemlyanskiy, M. de Jong, J. Ainslie, P. Pasupat, P. Shaw, L. Qiu, S. Sanghai, F. Sha. *COLING 2022*
- **Augmenting Pre-trained Language Models with QA-Memory for Open-Domain Question Answering.**
W. Chen, P. Verga, M. de Jong, J. Wieting, W. Cohen. *EACL, 2023*
- **Mention Memory: incorporating textual knowledge into Transformers through entity mention attention.**
M. de Jong, Y. Zemlyanskiy, N. FitzGerald, F. Sha, W. Cohen. *ICLR, 2022*
- **READTWICE: Reading Very Large Documents with Memories.**
Y. Zemlyanskiy, J. Ainslie, M. de Jong, P. Pham, I. Eckstein, F. Sha. *NAACL, 2021*
- **Neural Theorem Provers Do Not Learn Rules Without Exploration.**
M. de Jong and F. Sha. *arXiv preprint, 2019*
- **Towards a Robust Interactive and Learning Social Robot.**
M. de Jong, K. Zhang, T. Rhodes, A. Roth, R. Schmucker, C. Zhou, S. Ferreira, M. Veloso, *AAMAS, 2018*

Work Experience

- **Machine Learning Lab - USC** **Remote**
2021–2023
Doctoral Candidate - Advisor: Prof. Fei Sha
Topic: retrieval-augmented language modeling.
- **Google Research** **Remote**
2021–2023
Student Researcher - Host: William Cohen, Nicholas FitzGerald
Topic: retrieval-augmented language modeling.
- **Tibra Capital** **London, UK**
2011–2012
Trader
Simulated derivative pricing models to make markets on equity index options.
- **UBS Investment Bank** **London, UK**
June 2011 – September 2011
Summer Analyst, Currency Research
Published a research report on efficacy of foreign exchange intervention and the relationship between foreign exchange intervention and central bank independence.
- **Barclays Capital** **London, UK**
June 2010 – September 2010
Summer Analyst, Investment Banking Division
Conducted study on private equity transactions in the Netherlands.

Skills

- **Languages:** Native speaker of English and Dutch
- **Programming Languages:** Python, Java, Fortran
- **Frameworks:** Jax, Pytorch, Tensorflow, ROS