

Adam J. Fisch

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EDUCATION

Massachusetts Institute of Technology, Ph.D., Cambridge, MA September 2017 –
Major: Electrical Engineering and Computer Science GPA: 5.00/5.00
Concentration: Natural Language Processing
Advisor: Regina Barzilay

Princeton University, B.S.E., Princeton, NJ September 2011 – June 2015
Major: Mechanical Engineering GPA: 3.89/4.00
Certificates: Applications of Computing; Robotics and Intelligent Systems
Honors: Summa Cum Laude; Phi Beta Kappa; Sigma Xi; Tau Beta Pi May 2015

AWARDS

NSF Graduate Research Fellowship Award March 2017
Financial support for three years during the 2017-2022 five-year period.

Calvin Dodd MacCracken Senior Thesis Award May 2015
Princeton Engineering School award to the senior thesis or project work that is most distinctive for its inventiveness and technical accomplishment. (See MARVIN).

Donald Janssen Dike Award for Excellence in Undergraduate Research, 1st place May 2015
Princeton MAE departmental award given annually to the senior or seniors who, in the opinion of the faculty of the department, have excelled in undergraduate independent work.

John Marshall II Memorial Funding Award for Independent Work October 2014
Additional senior thesis funding awarded based on research proposals.

Princeton Shapiro Prize for Academic Excellence September 2012
Awarded to the top ~50 freshman and sophomores (each) based on academic record.

WORK EXPERIENCE

Google AI Language, Seattle, WA June 2019 –
Research Intern (Host: Kenton Lee)

- Research in Natural Language Processing.

Facebook AI Research, New York, NY August 2015 – August 2017
Research Engineer

- Implemented algorithms for large-scale representation learning and personalized ranking.
- Researched novel neural methods for natural language processing and question answering.
- Processed and analyzed data at Facebook scales with Hive and Presto.

Facebook, New York, NY May – August 2014
Software Engineering Intern, Photos

- Worked for the Photos infrastructure team on enhancing privacy checks.
- Sped up critical endpoints for both photos and photo albums, reducing global CPU usage.

Dynamical Controls Systems Laboratory, Princeton, NJ
Research Intern (Supervisor: Professor Naomi Leonard)

June – August 2013

- Researched control laws for coordinating autonomous groups of robots, focusing on biologically inspired controls emulating fish behavior found in nature.
- Implemented control laws in MATLAB on MiaBot Pro floor robots.

Princeton Environmental Institute, Princeton, NJ
Research Intern (Supervisors: Professors Howard Stone and Guy Nordenson)

June - August 2012

- Researched the mechanics of storm surge from hurricanes, and its impact on coastal cities.
 - Developed preventative strategies for a flooding control plan for the city of Shanghai.
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SKILLS

- **Programming:** Python; Lua; Deep Learning Frameworks (Torch, PyTorch, Tensorflow, Theano); SQL (Hive, Presto, SQLite); Java; C; MATLAB; PHP; Bash.
 - **Technical:** Microprocessors and circuits; Creo Parametric 3D Modeling; Machine tools.
 - **Other:** Unix/Linux; LaTeX; Mercurial; Proficient in Hebrew.
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INTERESTS

- **Personal:** The outdoors; running; biking; woodworking and design; electronics.
 - **Academic:** Machine learning; artificial intelligence; natural language processing; robotics.
 - **Current Research:** Transfer learning; Machine reading; Multilingual NLP.
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PUBLICATIONS

Adam Fisch, Jiang Guo, Regina Barzilay. *Working Hard or Hardly Working: Challenges of Integrating Typology into Neural Dependency Parsers*. In Conference on Empirical Methods on Natural Language Processing. 2019.

Ledell Wu, Adam Fisch, Sumit Chopra, Keith Adams, Antoine Bordes, Jason Weston. *StarSpace: Embed All The Things!* In AAAI Conference on Artificial Intelligence. 2018.

Danqi Chen, Adam Fisch, Jason Weston, Antoine Bordes. *Reading Wikipedia to Answer Open-Domain Questions*. In Annual Meeting of the Association for Computational Linguistics. 2017.

Alexander H. Miller, Will Feng, Adam Fisch, Jiasen Lu, Druv Batra, Antoine Bordes, Devi Parikh, Jason Weston. *ParLAI: A Dialog Research Software Platform*. In Conference on Empirical Methods on Natural Language Processing. 2017.

Alexander H. Miller, Adam Fisch, Jesse Dodge, Amir-Hossein Karimi, Antoine Bordes, Jason Weston. *Key-Value Memory Networks for Directly Reading Documents*. In Conference on Empirical Methods on Natural Language Processing. 2016.

Adam Fisch, Max Shatkhin. *MARVIN: Multimodally Advantaged Robotic Vehicle for Improved Navigation*. Supervised by Clarence Rowley and Andrew Houck. Bachelor Thesis, Princeton University. 2015.