

Deric Pang

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EXPERIENCE

- Google** Sept. 2019 – Present
Software Engineer New York, NY
- Semantic parsing and question answering for Google Search.
 - Improving NLU through distillation from massive pretrained models like T5.
- UW Natural Language Processing** Jan. 2018 – June 2019
Researcher, advised by Noah Smith University of Washington
- Improved textual inference by incorporating syntactic information in neural models [2].
- Unity Technologies** June 2018 – Sept. 2018
Machine Learning Intern San Francisco, CA
- Shipped multi-agent curriculum learning in the Unity Machine Learning Agents Toolkit.
- NVIDIA** Mar. 2018 – June 2018
Applied Research Intern Redmond, WA
- Developed and investigated methods of training neural networks in simulation for autonomous navigation.
 - Built a rover which was 7% more autonomous than robots using previously published techniques.
- Programming Languages and Software Engineering Lab** Mar. 2015 – Jan. 2018
Researcher, advised by Michael Ernst, Luke Zettlemoyer, and René Just University of Washington
- Worked on Tellina, a tool to generate bash commands from plain English using deep learning [1].
 - Created an automatic bug finder using patch minimization and delta debugging techniques [3].
- Amazon Alexa AI** June 2017 – Sept. 2017
Software Development Engineering Intern Seattle, WA
- Shipped features in Amazon's internal deep learning framework specialized for speech recognition.
 - Built a system to automatically convert Alexa's acoustic model into other deep learning frameworks.
- Marchex** June 2016 – Sept. 2016
Software Engineering Intern Seattle, WA
- Built an automatic speech recognition system based on the Deep Speech 2 neural network architecture.
- Amazon** Mar. 2016 – June 2016
Software Development Engineering Intern Seattle, WA
- Used AWS SWF, Lambda, S3, DynamoDB, SQS, and SNS to automatically update bank account validation files.

EDUCATION

- University of Washington** Sept. 2018 – June 2019
M.S. in Computer Science
Thesis: *Improving Natural Language Inference with Syntactic Word Representations*
- University of Washington** Sept. 2014 – Mar. 2018
B.S. in Computer Science
Honors: *cum laude* (GPA: 3.79/4.00), Phi Beta Kappa
CRA Outstanding Undergraduate Researcher Award (Honorable Mention)

PUBLICATIONS

- [1] X. V. Lin, C. Wang, D. Pang, K. Vu, L. Zettlemoyer, and M. D. Ernst. Program synthesis from natural language using recurrent neural networks. Technical report, University of Washington, 2017.
- [2] D. Pang, L. H. Lin, and N. A. Smith. Improving natural language inference with a pretrained parser. *arXiv preprint arXiv:1909.08217*, 2019.
- [3] S. Pearson, J. Campos, R. Just, G. Fraser, R. Abreu, M. D. Ernst, D. Pang, and B. Keller. Evaluating and improving fault localization. In *ICSE*, 2017.