Deric Pang

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EXPERIENCE

Google Oct. 2022 - Present

Senior Software Engineer, Tech Lead

New York, NY

· Semantic parsing and question answering for Google Search.

· Improving Google Search query understanding via distillation from massive pretrained language models.

GoogleSept. 2019 – Oct. 2022
Software Engineer
New York, NY

· Developed a method to generate synthetic query examples via neural embeddings.

· Built a system to mine entity relations from web documents.

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 March 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

March 2015 - Jan. 2018

Researcher, advised by Michæl 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 Al 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.

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 - March 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.