Deric Pang

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EXPERIENCE

Google Sept. 2019 – Present

Software Engineer New York, NY

· Semantic parsing for Google Search.

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 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.

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

June 2019

M.S. in Computer Science

Thesis: Improving Natural Language Inference with Syntactic Word Representations

University of Washington

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.