

Deric Pang

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EDUCATION

University of Washington, Seattle

M.S. in Computer Science

Graduating June 2019

University of Washington, Seattle

B.S. in Computer Science

Sept. 2014 – Mar. 2018

Honors: *cum laude* (GPA: 3.79/4.00), Phi Beta Kappa

CRA Outstanding Undergraduate Researcher Award (Honorable Mention)

Swiss Federal Institute of Technology in Zürich (ETH Zürich)

Sept. 2016 – Feb. 2017

University of Washington Computer Science & Engineering Direct Exchange

Graduate Coursework: Statistical Methods, Data Mining, Information Retrieval

Senior Coursework: Machine Learning, Natural Language Processing, Data Visualization, Complexity, Algorithms, Graphics, Visual Computing

EXPERIENCE

Unity Technologies

Machine Learning Intern

June 2018 – Sept. 2018

San Francisco, CA

- Shipped multi-agent curriculum learning in the Unity Machine Learning Agents Toolkit.

NVIDIA

Applied Research Intern

Mar. 2018 – June 2018

Redmond, WA

- Created and investigated methods to train neural networks in simulation for autonomous navigation.
- Built a rover which was 7% more autonomous than robots using previously published techniques.

Noah's Ark — UW Natural Language Processing

Researcher, advised by Noah Smith

Jan. 2018 – Present

University of Washington

- Improving natural language inference by incorporating linguistic structure into neural attention networks.

Alexa Machine Learning — Amazon

Software Development Engineering Intern

June 2017 – Sept. 2017

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.

Programming Languages and Software Engineering Lab

Undergraduate Researcher, advised by Michael Ernst, Luke Zettlemoyer, and René Just

Mar. 2015 – Jan. 2018

University of Washington

- Worked on the Tellina project [1] to generate bash commands from plain English using deep learning.
- Created an automatic bug finder using patch minimization and delta debugging techniques [2].

Marchex

Software Engineering/Research Intern

June 2016 – Sept. 2016

Seattle, WA

- Built an automatic speech recognition system based on the Deep Speech 2 neural network architecture.

Amazon

Software Development Engineering Intern

Mar. 2016 – June 2016

Seattle, WA

- Used AWS SWF, Lambda, S3, DynamoDB, SQS, and SNS to automatically update bank account validation files.

Languages: Python, Java, C, C++, Shell, Scala, HTML & CSS, JavaScript, \LaTeX

Tech/Tools: PyTorch, MXNet, TensorFlow, AWS, D3, Git, Ant, Gradle, Kaldi

PUBLICATIONS

- [1] X. V. Lin, C. Wang, **Deric Pang**, K. Vu, L. Zettlemoyer, and M. D. Ernst. Program synthesis from natural language using recurrent neural networks. Technical Report UW-CSE-17-03-01, University of Washington Department of Computer Science and Engineering, Seattle, WA, USA, Mar. 2017.
- [2] S. Pearson, J. Campos, R. Just, G. Fraser, R. Abreu, M. D. Ernst, **Deric Pang**, and B. Keller. Evaluating and improving fault localization. In *ICSE 2017, Proceedings of the 39th International Conference on Software Engineering*, Buenos Aires, Argentina, May 2017.