# **DERIC PANG**

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#### **EDUCATION**

# University of Washington, Seattle

Graduating June 2019

Combined B.S./M.S. Program in Computer Science Paul G. Allen School of Computer Science & Engineering

Overall GPA: 3.79/4.00 — Dean's List

**Graduate Coursework:** Statistical Methods, Data Mining, Information Retrieval

**Senior Coursework:** Machine Learning, Natural Language Processing, Data Visualization,

Complexity, Algorithms, Graphics, Visual Computing

### **EXPERIENCE**

## Alexa Machine Learning — Amazon

June 2017 - Sept. 2017

Software Development Engineering Intern

Seattle, WA

- · Worked on Amazon's internal deep learning framework specialized for automatic speech recognition.
- · Launched a system to translate Alexa's production acoustic model into other deep learning frameworks.

# **Programming Languages and Software Engineering Lab**

Mar. 2015 - Present

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

University of Washington

- · Working 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** June 2016 – Sept. 2016

Software Engineering/Research Intern

Seattle, WA

- · Built an automatic speech recognition system based on the Deep Speech 2 neural network architecture.
- · Improved Australian English transcription with the Kaldi automatic speech recognition toolkit.

**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.
- · Reduced on call workload by 20 hours a month.

## **Machine Learning | Software Design & Implementation**

Winter 2016 – Present University of Washington

Teaching Assistant for CSE 446 and CSE 331

· Planned and delivered lectures during weekly recitations.

· Held office hours and provided feedback for homework assignments and programming projects.

## **SKILLS SUMMARY**

**Languages:** Python, Java, C, C++, Shell, Scala, HTML & CSS, JavaScript, Languages: Tech/Tools: TensorFlow, MXNet, PyTorch, 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.