

# HEE (PETER) HWANG

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## EDUCATION

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**University of Massachusetts, Amherst**  
M.S. Computer Science

September 2019- Present  
*Amherst, MA*

**University of California, Los Angeles**  
B.S. Computer Science

June 2015  
*Los Angeles, CA*

## RESEARCH EXPERIENCE

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**Graduate Research Assistant**  
*University of Massachusetts, Amherst*

Sept 2019 - Present  
*Amherst, MA*

- Built legal issue classifier and analyzed seasonality (Advisor: Dr.Brendan O'Connor)
- Implement neural models that predict pitch accent and boundary tone using ToBI transcription from Boston University News Radio Corpus (Advisor: Dr.Kristine Yu) [[Colab](#)]

**Undergraduate Research Assistant**  
*University of California, Los Angeles*

Apr 2014 - June 2014  
*Los Angeles, CA*

- Contributed research for the study of aspiration, and the gradient structure of English prefixed words [[Kie Zuraw and Sharon Pepperkamp, 2015](#)] by segmenting the closure before the voice onset time and doing statistical analysis (Advisor: Kie Zuraw)

## WORK EXPERIENCE

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**Software Engineer**  
*Samsung Electronics*

February 2017 - May 2019  
*South Korea*

- Implemented a phoneme to grapheme converter for a Korean speech recognition system
- Maintained the content and sync framework which synchronize data between devices and web servers
- Designed and implement layout traversal program using Google Talkback
- Create hold duration and ignore repeat on Android UI framework

## CLASS PROJECTS

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### Natural Language Processing

- Text2Time: Built a neural model that predicts the decade of NYT news from the 1960s to 2010s using Naïve Bayes and BERT [[Github](#)]
- Built language models including n-gram, recurrent neural network, and attention mechanism

### Reinforcement Learning

- Created an RL program that guarantees better policy using trajectory using PDIS and CMA-ES
- Implemented various kinds of optimization and reinforcement algorithm including Q-Learning

## TECHNICAL STRENGTHS

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**Over 5000 Lines**

C/C++, Java

**Over 2000 Lines**

Python

**Familiar**

Linux, Android, Pytorch, and  $\text{\LaTeX}$