# **Anthony Liu**

http://anthliu.github.com

Email: anthliu@umich.edu Mobile: +1-517-402-9407

Class of 2019

#### **EDUCATION**

## • University of Michigan

Ann Arbor, MI

BSE in Computer Science (ongoing); GPA: 3.95

Fall 2015 - Spring. 2019

o Awards: Engineering Deans Honor List, University Honors, James B. Angell Scholar

### Work Experience

• Bloomberg L.P.

New York City, NY

Data Science Intern 2018 Summer

- o Implemented 20 state-of-the-art active learning query strategies from recent papers in the field
- o Tested strategies against diverse datasets in text classification, sentiment analysis, NER
- Designed a flexible framework for using active learning for ML teams within Bloomberg

• Clinc Inc.

Ann Arbor

Software Intern 2017 Summer

- Developed an automated crowd data collection library through the Amazon MTurk API, was used to collect 10,000 natural language queries for a conversational AI
- $\circ$  Created tools to detect and visualize topics from natural language queries using unsupervized learning methods clustering, TfIdf, LDA t-SNE

#### RESEARCH PROJECTS

### • Efficiently Combining Human and Machine Effort on Annotation Tasks

Research Lead, First author

2017 Summer

- o Advisor: Prof. Walter S. Lasecki
- o Conference: To be submitted in ACL 2019
- o Led creation of an approach and system for studying text annotation under partially trained NLP systems

# • ML Feedback: Communication channels between humans and machines for finding unknown unknowns

Research Lead, First author

2018 Spring - current

- Advisor: Prof. Walter S. Lasecki and Dr. Ece Kamar (Microsoft Research)
- o Conference: To be submitted in IJCAI 2019
- Created novel method for leveraging human beat the machine input for finding unknown unknowns.

## • Uncertainty and Diversity Tradeoffs for Active Learning in Large Scale Classification Problems

Research Lead, First author

2018 Fall - current

- o Advisor: Prof. Walter S. Lasecki
- o Collaborators: Dr. Christoph Kofler, Dr. Wooyoung Lee, Dr. Anju Kambadur of Bloomberg Data Science
- $\circ$  Conference: TBD
- Leading a team of 4 undergraduates, leading project direction

#### TEACHING EXPERIENCE

# • University of Michigan

Ann Arbor

Teaching Assistant

2017 Fall - Present

• Operating Systems (2017): Led discussion of 20 students. Held weekly office hours helping students complete class projects.

Final instructor ratings: Top 25% in overall instruction effectiveness

• Artificial Intelligience (2018, current): Led discussion of 20 students. Held weekly office hours helping students complete class projects.