

# Jianing (Jed) Yang

jianing.jed.yang@gmail.com ◊ 404-915-9997 ◊ jedyang.com

## EDUCATION

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- Carnegie Mellon University** Aug. 2019 - Present  
Master of Science in Machine Learning  
Co-advisors: Louis-Philippe Morency, Matt Gormley
- Georgia Institute of Technology** Aug. 2015 - Dec. 2018  
Bachelor of Science in Computer Science  
Advisor: Jimeng Sun

## PUBLICATIONS

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- MTGAT: Multimodal Temporal Graph Attention Networks for Unaligned Human Multimodal Language Sequences*  
**Jianing Yang**, Yongxin Wang, Ruitao Yi, Yuying Zhu, Azaan Rehman, Amir Zadeh, Soujanya Poria, Louis-Philippe Morency  
*Submitted to a major CS conference, under review*
- What Gives the Answer Away? Question Answering Bias Analysis on Video QA Datasets*  
**Jianing Yang**, Yuying Zhu, Yongxin Wang, Ruitao Yi, Amir Zadeh, Louis-Philippe Morency  
*Workshop on Multimodal Language, ACL, 2020*
- SUOD: Toward Scalable Unsupervised Outlier Detection*  
Yue Zhao, Xueying Ding, **Jianing Yang**, Haoping Bai  
*Artificial Intelligence for Cyber Security workshop, AAAI, 2020*

## RESEARCH EXPERIENCE

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- CMU MultiComp Lab** August 2019 - Present  
*Graduate Researcher*
- Designed a graph neural network (GNN) algorithm for fusion of multimodal temporal data
  - Analyzed language artifacts in video QA datasets
  - Built pipeline for multimodal question answering about social situations
  - Coordinated annotation of dataset
  - Advisor: Prof. Louis-Philippe Morency
- CMU ML/NLP Research Group** August 2019 - Present  
*Graduate Researcher*
- Designed new algorithms to improve scheduled sampling training for seq2seq models
  - Validated effectiveness of the method on NER, Machine Translation and Text Summarization tasks
  - Advisor: Prof. Matt Gormley
- Georgia Tech Machine Learning for Healthcare (SunLab)** Aug. 2017 - Dec. 2018  
*Undergraduate Research Assistant*
- Built cardiac arrest prediction pipeline using multimodal temporal data collected from ICU patients.
  - Advisor: Prof. Jimeng Sun

## INDUSTRY EXPERIENCE

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### **Amazon**

Feb. 2019 - Aug. 2019

*Software Development Engineer, AWS Identity*

*Seattle, WA*

- Led a load balancing project to decrease system latency from 20 seconds to milliseconds.
- Received award for technical soundness and leadership at 2019 Q2 AWS Identity organization meeting.

### **Amazon**

May 2017 - July 2017, May 2018 - July 2018

*Software Development Engineer Intern, AWS Identity*

*Seattle, WA*

- Extended AWS Microsoft Active Directory to support multiple Availability Zones to increase service availability (2018 project).
- Designed and implemented a backup mechanism for AWS Simple Active Directory to enhance system reliability (2017 project).

## TEACHING EXPERIENCE

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### **CUHK Alumni Association AP Training Camp**

Sep. 2016 - May 2017

*AP Computer Science Tutor*

- Gave 1-on-1 lectures to high school students for AP Computer Science.
- Designed and graded homeworks to strengthen student's understanding.

## RELEVANT COURSEWORK

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### **PhD/MS Level courses**

Convex Optimization (CMU)

Probability and Statistics (CMU)

Advanced Machine Learning (CMU)

Deep Reinforcement Learning (CMU)

Machine Learning with Large Datasets (CMU)

Data Analysis (CMU)

Deep Learning (GaTech)

Natural Language Processing (GaTech)

Computer Vision (GaTech)

Introduction to Robotics and Perception (GaTech)

Introduction to High Performance Computing (GaTech)

Advanced Operating Systems (GaTech)