Ananya Ganesh

github.com/ananyaganesh

EDUCATION

University of Massachusetts, Amherst

Master of Science in Computer Science

Anna University

Bachelor of Engineering in Computer Science

Amherst, MA

Expected May 2019

Chennai, India

Aug 2013 - Jun 2017

Mobile: (570) 293-2846

Email: aganesh@cs.umass.edu

Publications

Haw-Shiuan Chang, Amol Agarwal, **Ananya Ganesh**, Anirudha Desai, Vinayak Mathur, Alfred Hough, and Andrew McCallum. Efficient graph-based word sense induction by distributional inclusion vector embeddings. *TextGraphs 2018 at NAACL-HLT*

EXPERIENCE

Information Extraction and Synthesis Laboratory

UMass Amherst

Research Intern, Natural Language Processing

May 2018 - Present

Developing novel role representations for the task of semantic role labeling (SRL) using multi-task learning. Performed error analysis on a state-of-the-art SRL system and identified areas for improvement.

Lexalytics

Amherst, MA

Independent study

Jan 2018 - Apr 2018

Developed an efficient new method to perform word sense induction using graph-based clustering. Achieved state-of-the-art results across three evaluation benchmarks

Nara Institute of Science and Technology

Nara, Japan

Research Intern, NLP

Jun 2016 - July 2016

Constructed a dictionary of flexible multi-word expressions (MWEs) in English for use in automatic annotation. Implemented a rule-based model to detect variability in MWEs using the LDC Gigaword corpus.

Serendio Inc.

Chennai, India

Data Science Intern

Dec 2015 - Jan 2016

Predicted trends in currency exchange rates by performing sentiment analysis of posts on financial forums and Twitter using machine learning and natural language processing.

SKILLS

Python, TensorFlow, scikit-learn, numpy, Git, Java, PyTorch, NLTK, C++, Matlab, Tableau, HTML, SQL

Projects

Low-shot learning for face recognition

Course Project, Neural Networks

Python, PyTorch

Feb 2018 - Apr 2018

Implemented a hallucination based approach for low shot learning for face recognition that was originally proposed by Facebook AI Research for image classification. Achieved a 4% improvement over a baseline model while using only 20% of the training data.

Question duplication for the Quora dataset

Course Project, Advanced NLP

Python, PyTorch

Apr 2018 - May 2018

Implemented a Siamese LSTM network to detect duplicate questions on Quora with high accuracy. Also detected important features that decide duplicates, such as W-h question type.

The Sound of Sirens

HackUMass Five: 36 hour hackathon

Tensorflow, Myo SDK, Amazon EC2 GPU

Nov 2017

Built a signaling system using neural networks to assist hearing impaired drivers, which causes an armband to vibrate if sirens are recognized nearby.