# SriKrishna Kompella

#### I TEACH LANGUAGE..... TO MACHINES!

12F Brandywine, Amherst, MA - 01002

□ (413)552-9874 | Skckompella@gmail.com | Mwww.skckompella.com | Skckompella | Skckompella | Skckompella

## Education

#### University of Massachusetts Amherst - Amherst, MA

Aug 2016 - Present

MASTER OF SCIENCE IN COMPUTER SCIENCE

GPA: 4.0

• Courses: Advanced Machine Learning, Advanced NLP, Distributed Systems, Algos and Systems for Data Science, Quantum Computing

#### PES Institute of Technology - Bangalore, India

Aug 2009 - Jun 2013

BACHELOR OF ENGINEERING IN COMPUTER AND INFORMATION SCIENCES

GPA:3.67

# **Experience**

The Hive - Palo Alto, CA

May 2017 - Sept 2017

NLP INTERN - DIALOG SYSTEMS

- · Building interactive dialog systems using end to end neural network models and real world datasets
- · Improving memory and attention mechanisms(both CNN & RNN based seq2seq networks) to obtain more realistic and useful dialog
- · Augmented dialog existing knowledge using multiple encoders (multi-task learning) to add more information to dialog

#### Nvidia Corp. - Bangalore, India

Jul 2013 - Jul 2016

TECH LEAD - VIRTUALIZATION (QUALITY)

Oct 2014 - Jul 2016

- · Responsible for delivering test strategies, and automation tools for validating Nvidia's Hypervisor tech used in autonomous vehicles
- Developed multiple tools and test strategies to test components of the SoC like Memory Controller, UART, I2C, CAN etc
- Contributed to defining and implementing Automotive safety and quality policies
- · Achievement: Fastest promotion (in one year from joining as New College Grad) and youngest Lead in my Business unit

# **Skills**

**Languages** Python, C++, C, Java, Bash

**Tools** PyTorch, Keras, TensorFlow, SciKit Learn, NumPy, SciPy, OpenCV

**Deep Learning** RNN, CNN, Memory Networks, Seq2Seq models, Reasoning over Attention and Memory

**NLP** Dialog generation, Information Extraction, Question Answering, Text Classification

# Research

#### Memorizing context for dialog generation

DEEP LEARNING, DIALOG SYSTEMS, NATURAL LANGUAGE PROCESSING

- Use a second encoder (a Memory Network) that encodes context (prior turns in the conversation)
- Working toward publishing this work

#### **Extracting Action Graphs from Materials Science Synthesis Procedures**

Unsupervised Learning, Information Extraction, Natural Language Processing

- · Advised by Prof. Andrew McCallum
- · Generate an action graph (like a flowchart) of a synthesis procedure from text in a Material Science research paper.
- Under review at NIPS 2017 Workshop on Machine Learning for Molecules and Materials

# **Projects**

## Interactive dialog using Convolutional Sequence to Sequence Networks

June 2017 - July 2017

Python, PyTorch

DEEP LEARNING, NLP

repurposing for Dialog generation

• Reproduced the work of Gehring et al. and repurposing for Dialog generation

## **Relation Extraction using Recurrent Neural Networks**

Oct 2016 - Dec 2016

DEEP LEARNING, NLP

Python, PyTorch

• Improved accuracies over existing works by just modifying the input vector representations

#### **Domain adaptation using Deep Adversarial Neural Networks**

Oct 2016 - Dec 2016

DEEP LEARNING, DOMAIN ADAPTATION FOR NLP AND VISION

• Using RNNs for supervised relationship extraction

Python, TensorFlow

- Research Project in domain adaptation for sentiment analysis and object recognition
- Added new optimization objective which improved classification accuracy up to 3% with text data and up to 6% with image data