# ASHWIN NARESH KUMAR

5501 Centre Ave, Pittsburgh, PA 15232 | 412-961-2611 | anareshk@cs.cmu.edu | https://www.linkedin.com/in/ashwinnaresh/http://ashwinnaresh.github.io

## **EDUCATION**

# Carnegie Mellon University, Pittsburgh, PA

Master of Science, Intelligent Information Systems, December 2018

Relevant Coursework: Machine Learning (10-601, Fall 2017), Search Engines (11-642, Fall 2017), Language and Statistics (11-661, Fall 2017)

# PES Institute of Technology (PESIT), Bangalore, India

Bachelor of Engineering, Computer Science and Engineering, May 2016

GPA: 9.74/10.0

## **SKILLS**

Programming/Scripting Languages: (Proficient) Python; (Familiar) C, Java, C++, JavaScript, PHP, SQL

Frameworks and tools: (Proficient) Keras, TensorFlow, OpenStack, Git

# **EXPERIENCE**

# **Software Engineer**

Brocade Communications Systems, Bangalore, India, July 2016 – July 2017

- Implemented a CLI and REST framework for discovering connected LTE network components
- Prototyped a smart load balancer which balances the mobile traffic for efficient egress port utilization on Enterprise Switches. Provisional Patent filed on the proposed solution

#### Intern

Brocade Communications Systems, Bangalore, India, January – June 2016

- Designed and implemented a LSTM network for performing anomaly prediction in LTE network traffic using Google TensorFlow
- Developed a LSTM model capable of detecting inconsistencies in LTE protocol message exchanges in mobile traffic flows

# **Summer Research Intern**

Center for Cloud Computing and Big Data, PESIT, Bangalore, India, May – August 2015

- Implemented a cloud federation solution for OpenStack using Nova cells (EMC<sup>2</sup> funded project) which was presented at the OpenStack Atlanta Summit 2014. Extended this solution using Nova Availability Zones and published the findings in the proceedings of the 2015 IEEE International Conference on Information Technology, India
- Architected a hybrid cloud solution for federating OpenStack and vmware vCloud Air using Nova Availability Zones (vmware funded project)

### **PROJECTS**

# Automated CAPTCHA Generation from Annotated Images using Encoder Decoder Architecture

PES Institute of Technology, Bangalore, India, Spring 2016

Developed a Question Generation system (questions with multiple answers) using annotated images as a knowledge base. The
system was built using a GRU Encoder Decoder architecture and proposed as a CAPTCHA. A technical paper on this project
is published in the <u>proceedings</u> of the 2016 IEEE International Conference on Information Technology, India.

# **Automated Content Suggestion from Document Writing**

PES Institute of Technology, Bangalore, India, Fall 2015

Designed and implemented a system which provides content suggestions based on the document context. The content suggestions are prepared after performing keyword extraction, concept tagging from the document sliding windows and a web search on the extracted keywords and concepts. A 42% increase in document preparation time was achieved with the system when compared to a manual composition and these results are published in the <u>proceedings</u> of the 2016 IEEE International Conference on Computational Intelligence and Computing Research, India.

# **Cricket Match Summary Generation**

PES Institute of Technology, Bangalore, India, Fall 2015

 Developed a cricket match summary generation system given the commentaries. The commentaries were web scraped and NER was performed using a RNN. Commentaries were tagged with 'match events' using a MaxEnt model and a summary based on the outputs of the RNN and the MaxEnt model was generated.

## **AWARDS**

- Winner at NVA Hackathon, Jan 2017, Brocade Communications, Bangalore among over 200 participants.
- Third Runner Up at HackerRamp Hackday, Myntra Designs, Bangalore among over 300 participants.