

ASHWIN NARESH KUMAR

5501 Centre Ave, Pittsburgh, PA 15232 | 412-961-2611 | anareshk@andrew.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: Introduction to 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 (EMC² 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 [proceedings](#) 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 [proceedings](#) 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.