

# Shankar Venkitachalam

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## SUMMARY

Computer Science graduate student with 5 years of experience as a software engineer looking for internship opportunities during summer 2018.

## EDUCATION

**University of Massachusetts Amherst** Aug 2017 - May 2019  
Master of Science (MS) in Computer Science Amherst, MA  
Relevant coursework: Natural Language Processing, Machine Learning, Neural Networks

**National Institute of Technology Calicut** Jul 2008 - May 2012  
Bachelor of Technology (B.Tech) in Computer Science and Engineering Calicut, India  
Relevant coursework: Image Processing, Data Structures and Algorithms, Advanced Topics in Algorithms, Design and Analysis of Algorithms

## EXPERIENCE

**Snapdeal** Bangalore, India  
**Senior Software Engineer, Machine Learning** Dec 2015 - April 2017

- Trained a product classifier that predicts categories based on title and other text data of the product.
- Used deep learning models to create an Image Quality Control System that classifies and filters images based on blurriness, JPEG quality and presence of objectionable content.
- Built a system using Apache Spark for feature extraction, clustering and nearest neighbour computation of catalog images, reducing the processing time by over 50%.
- Implementations were done using Python, Caffe, Scikit-learn, Keras and OpenCV.

**Adobe Systems** Bangalore, India  
**Member of Technical Staff II, Software Development** Aug 2013 - Nov 2015

- Part of the team that created Adobe Captivate Prime, a cloud based learning management system.
- Participated in the development process from ideation and conceptualization to product release.
- Designed and implemented the content management server.
- Used Java, Spring Framework, JavaScript for implementations.

**Tejas Networks** Bangalore, India  
**R&D Engineer, Software Development** Aug 2012 - Aug 2013

- Implemented MPLS-TP protocol on network switches.
- Made enhancements and bug fixes to the Network Manager codebase.
- Used C, C++ for all implementations.

## SKILLS

- Languages: Python, Java, C, C++, JavaScript
- Machine Learning: Caffe, Keras, Scikit-Learn, OpenCV, Apache Spark

## INTERESTS

Natural Language Processing, Machine Learning, Computer Vision.

## PROJECTS

### Face recognition using Biomimetic Pattern Recognition (BPR)

- Implemented a face recognition system using neural networks based on the novel theoretical model of Biomimetic Pattern recognition.
- Tested against traditional methods and achieved significant reduction in the false negative rate.

### Cross-category Fashion recommendation system

- Developed a system that recommends outfit combinations using clothing items from across different categories.
- Used a twin Convolutional Neural Network model trained on pairs of images of catalog items that are frequently bought together.

## AWARDS

- Won the award for outstanding performance in the quarter in Q3, 2016 at Snapdeal.