

## Technical Skills

*Languages:* Python, R, Java.

*Frameworks/Libraries:* scikit-learn, XGBoost, Keras, Tensorflow, OpenCV, caret, Apache Spark.

*Other:* Git/GitHub, Jupyter, PyDev, AWS.

## Project Experience

### Plot and Navigate a Virtual Maze - [goo.gl/J9epXz](https://goo.gl/J9epXz)

Nov 2016

- Developed an AI robot that won 2016 World Micromouse Championship Maze.
- Evaluated in detail whopping 10 different kinds of AI algorithms to solve complex mazes.

### Object Recog in CIFAR-10 with Convolutional Neural Networks - [goo.gl/xzBNua](https://goo.gl/xzBNua)

Nov 2016

- Built a deep Convolutional Neural Network for object recognition in CIFAR-10 dataset.
- Tuned the model to achieve 81% accuracy, which is close to state of the art results.

### Predict Sentiment From Movie Reviews - [goo.gl/UcTNRv](https://goo.gl/UcTNRv)

Nov 2016

- Harnessed word embedding for Natural Language Processing with Convolutional Neural Network to model Sentiment.
- Optimized the model by tuning hyperparameters and achieved 88% accuracy same as Stanford researchers.

### Text Generation with LSTM Recurrent Neural Networks - [goo.gl/Mox8oI](https://goo.gl/Mox8oI)

Nov 2016

- Developed generative model with Recurrent Neural Network to learn from Alice's Adventures in Wonderland.
- Generated a very plausible text sequences which look very realistic and copies the style from Lewis Carroll's work.

## Work Experience

### Cisco Systems - Software Architect, Consultant

San Jose, CA | Jan 2006-Mar 2016

- Designed and implemented Cisco's IoT stack that collects data from endpoints and analyses with ML in real-time.
- Implemented from scratch extremely reliable and efficient transport layer for the IoT stack.
- Collaborated with other architects and engineers with very good engineering design documentation and code reviews.

### Various Companies - Architect & SSE

San Francisco Bay Area, CA | Jun 2001-Jan 2006

- Designed and implemented several applications using Spring, J2EE and LAMP stacks.
- Served as VP Engineering with a multi-functional team comprised of engineers, sales, and overseas QA team.

## Education

### Udacity - AI for Robotics, Machine Learning Nanodegree, Self-Driving

Oct, Nov, Present 2016

*Car Nanodegree (in progress)*

### UC Berkeley - Artificial Intelligence CS188

Oct 2016

### Stanford University - Machine Learning, Convolutional Neural

Jun, Aug 2016

*Networks for Visual Recognition CS231n*

### University of Toronto - Neural Networks for Machine Learning

Jul 2016

### UC San Diego - Machine Learning With Big Data

Jun 2016

### S.V.U College of Engineering - B.Tech in Electronics and

May 1998

*Communications Engineering*

## Papers and other Activities

- Got invited by IIT Delhi to present my SW "Microprocessor Simulator" Jan 1997
- Paper "Pattern Recognition using Optical Neural Computers" Mar 1996
- Presented paper on "Robotics - Basics and Modern Dev" in college Apr 1995