
EDUCATION

Virginia Tech

Aug 2018 to Present

Degree: M.S. in Computer Engineering (Plan Of Study GPA = 4.0/4.0):

Important courses: Deep Learning (A grade), Advanced Machine Learning (A Grade), Computer Vision (A Grade), Big Data Text Summarization (A Grade), Linux Kernel Programming (A grade).

Thesis topic: Extracting figures and tables from scanned Electronics Thesis and Dissertations (ETD).

About thesis: Using Deep Learning (Resnet-101) to segment figures and tables from the PDF files of scanned ETDs to aid in downstream information retrieval tasks.

BITS Pilani

2011 to 2015

B.E Honours in EEE (Electrical and Electronics Engineering) (Overall GPA = 7.97/10):

Important courses: Digital Image Processing, Data Mining, C Programming, Engineering Maths, Data Structures and Algorithms (unofficial audit).

WORK EXPERIENCE

Walmart Labs

June 2019 to Aug 2019

Summer Associate (Global Data Analytics Platform):

- Built a tool to move Big Data from on-premise Hadoop cluster to Google Cloud Storage using Apache Spark.

Flipkart Internet Pvt. Ltd.

July 2015 to July 2018

Software Development Engineer

- Helped develop Deep Learning model to find semantically duplicate questions on products from users.
- Automated product review moderation through Deep Learning by building a multipurpose and extensible moderation service.
- Built capability to store and serve e-commerce review images at web-scale.

SKILLS

- **Experienced in** developing, training and deploying Deep learning models on cloud.
- **Experienced in** Python, Anaconda, Pytorch, Scikit-Learn, Pandas and Numpy.
- **Fluent with:** C++, Linux/Bash, Git/Github, Matlab, Java and HTML/CSS/Javascript.

PROJECTS

Trajectory prediction of pedestrians using Monte Carlo Dropout for autonomous cars

(*Bayesian Deep Learning*) Trained an RNN (LSTM) to not only predict the trajectory of a pedestrian, but also to predict the probability distribution of possible trajectories using Monte Carlo dropout.

Automatic Summary generation of electronic theses and dissertations (ETDs)

(*Deep Learning*) Trained and evaluated multiple deep machine translation models for automatically summarizing the text from ETDs given in PDF format.

Cell Phenotype Identification, Analysis and Classification

(*Computer Vision*) Implemented computer vision models for segmenting cells from their background and tracking them across a video for quantitative analysis.

Text Classification using CNNs

(*Deep Learning*) Trained an ML model to classify a sentence as a 'Question' or an 'Answer'.

Fluoroscopy based sparse reconstruction of coronary venous anatomy with application to cardiac resynchronisation therapy

(Computer Vision) Developed methods to effectively reconstruct 3-dimensional model of cardiac venous anatomy from X-ray images of human heart.

ADDITIONAL EXPERIENCE AND AWARDS

Graduate Teaching Assistant Virginia Tech - ECE 3574 - Applied Software Design - 3 semesters,
Virginia Tech - ECE 2574 - Data Structures and Algorithms - 1 semester

Secretary, Automation and Robotics Club (ARC) at BITS Pilani.

1st prize in Computer Vision and Robotics competition

Position 1st in Machinist (Real-time video processing and robotics competition) BITS Pilani National Technical Festival (ATMOS '13).

1st prize in Robotics competition

Position 1st in Maze Solver Competition at BITS Pilani National Technical festival (ATMOS '12).
