1207 G, University Terrace, Blacksburg VA 24060

# SAMPANNA KAHU

Looking for Full Time

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#### **EDUCATION**

Virginia Tech Aug 2018 to May 2020

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

<u>Important courses</u>: Linux Kernel Programming, Deep Learning, Advanced Machine Learning, Computer Vision, Big Data Text Summarization.

<u>Thesis topic</u>: Extracting figures and tables from scanned Electronics Thesis and Dissertations (ETD). <u>About thesis</u>: 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

- Built capability to store and serve e-commerce review images at web-scale. (Spring, Jetty, Couchbase, MySQL)
- Single-handedly built the feature of storing, moderating and serving product review images at web-scale. (Spring, Jetty, Couchbase, CDN)
- Developed a centralized moderation service to interface between Flipkart's systems and the moderation company's systems. (*Dropwizard*, *MySQL*)

#### SKILLS

- **Experienced in** developing web-scale software and Deep learning models.
- Experienced in Python, Anaconda, Pytorch, Scikit-Learn, Pandas and Numpy.
- Fluent with: Java, Linux/Bash, Git/Github, C#, C++ and HTML/CSS/Javascript.

#### **PROIECTS**

#### Exploring heterogeneous datasets using Hololens in Mixed Reality

(MixedReality, Hololens, Unity3D, ImmersiveAnalytics) Used MVC architecture to build an immersive environment for immersive data exploration & analysis using Hololens and Unity3D in Mixed Reality.

# Linux kernel module for profiling the CPU time consumption of each process.

(Linux kernel, C) Developed a Linux kernel module to compute the total amount of 'time' spent by each process on the CPU.

#### Few shot distillation learning using Monte Carlo Dropout

(Bayesian Deep Learning) Used Monte Carlo Dropout for enabling few-shot knowledge distillation from a teacher model into a student model.

## 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.