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Sampanna Kahu

Looking for Full Time

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Education

Virginia Tech Expected grad: Aug 2020 **Aug 2018** to **Aug 2020**

Degree: M.S. in Computer Engineering. GPA = 4.0/4.0 (Plan of Study)
Courses: Deep Learning, Advanced Machine Learning, Computer Vision, Big Data Text Summarization, Digital Libraries, Linux Kernel Programming.

Thesis topic: Extracting figures and tables from scanned Electronics Thesis and Dissertations (ETD).
About thesis: Using object detection to extract figures and tables from the PDF files of scanned ETDs to aid in downstream information retrieval tasks. Based on deepfigures-open.

BITS Pilani **2011** to **2015**

Degree: B.E Honours in Electrical and Electronics Engineering. Overall GPA = 7.97/10.0
Courses: Digital Image Processing, Data Structures and Algorithms (unofficial audit), Data Mining.

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

PROJECTS

Few shot deep knowledge 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.

Deep trajectory prediction of pedestrians using Monte Carlo Dropout for autonomous cars

(Bayesian Deep Learning) Trained an RNN (LSTM) to predict the trajectory of a pedestrian the probability distribution of possible trajectories using Monte Carlo dropout.

Deep task scheduler

(Linux kernel, Deep Learning, RNN) Using an artificial neural network to schedule tasks in Linux kernel

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

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

PUBLICATIONS

Classification and extraction of information from ETD documents (**http://hdl.handle.net/10919/96645**)

Using Deep Learning to Summarize Theses and Dissertations (**http://hdl.handle.net/10919/86406**)