

DIVYANSHU GOYAL

(+1)404-414-3762 ◊ digoyal@gatech.edu ◊ linkedin.com/in/divyanshu2594

EDUCATION

Georgia Institute of Technology, Atlanta

August 2019 - May 2021

→ M.S. Computer Science (**CGPA: 4.0**)

BITS, Pilani

August 2011 - June 2016

→ B.E. Computer Science and M.Sc. Mathematics (**CGPA: 8.75**)

SKILLS

Courses: Computer Vision, Deep Learning and Neural Networks, High Performance Computing, Advanced Operating Systems, Machine Learning, Information Retrieval, Data Structures and Algorithms, Database Systems.

Programming: C/C++, JAVA, Python

Software & Tools: Django, Docker, TensorFlow, PyTorch Jenkins, Github, IntelliJ, Azure, New Relic

WORK EXPERIENCE

Adobe Inc., SanJose (AI/ML Application Intern)

May 2020- July 2020

→ Built a framework to make relational datasets GDPR compliant.

→ Designed and implemented API endpoints for CustomerAI and AttributionAI, to track customer usage metrics.

Adobe Inc., Bangalore (Software Engineer)

July 2016- August 2019

→ Built an in-memory, distributed server capable of serving machine learning models at 35K QPS.

→ Reduced garbage collection by modifying the Prediction Algorithm (Field Factorization Machine).

→ Implemented Asynchronous Loggers(Disruptor architecture), a lock-free inter-thread communication library resulting in 10 fold higher throughput and lower latency.

→ Worked on Machine Learning Platform that provided data scientists capability to train and deploy machine learning models at scale without dealing with infrastructure requirements.

→ Designed and implemented capability to build custom data ingestion and processing pipelines.

→ Added support to provide custom methods for model validation and accuracy metric computation.

Qubole, Bangalore (Software Engineer Intern)

May 2015- July 2015

→ Implemented HIVE-JDBC storage handler which facilitated HIVE to create external tables on JDBC to avoid periodic data import into HDFS.

→ Added support for predicate-pushdown to reduce data transfer latency.

→ Implemented lazy split computation to enable child nodes to do split computation autonomously.

PROJECTS

Multimodal Image Sentence Querying System

→Built a multimodal language-vision model capable of querying images based on a language query.

→Developed model to generate latent space representation of images and query, which is then evaluated based on cosine similarity to fetch results.

Semantic Segmentation of Antarctic Satellite Imagery

→Using ensemble based CNN to automate the extraction of geological features on Antarctica satellite images.

Colorization of grey Scale videos

→Used CNN's and LSTM's for automatic colorization of grey scale videos. Used CNN for encoding video frames and LSTMs for capturing temporal color pattern across frames.

GTStore (Protoype implemenatation of Amazon DynamoDB):

→Implemented various features and functionalities of Amazon DynamoDB. Main features include consistent hashing, virtual nodes, read repair, hinted handoff, membership detection via hearbeat packets. The prototype was built with a weak consistency model to support faster writes.

ACADEMIC ACHIEVEMENTS AND EXTRACURRICULAR

→ Teaching assistant for Advanced Operating Systems course at Georgia Tech.

→ Served as Teaching Assistant position for Network Programming Course at BITS Pilani.