6313076395

1 EDUCATION

Stony Brook University

Stony Brook, NY

Master of Science in Computer Science, Graduating Dec 2020, GPA: 3.85/4.0

Aug 2019 - Present

- o Data Science, Natural Language Processing, Computer Vision, Big Data, Probability & Statistics.
- o Teaching Assistant: Programming Abstractions (Fall '19), Software Engineering (Spring '20, Fall '21).

University of Mumbai

Mumbai, India

Bachelor of Engineering in Information Technology; GPA: 3.9/4.0

Aug 2011 - May 2015

o Data Structures & Algorithms, Discrete Maths, Software Engineering, Data Mining, Operating Systems

₽ Publications

Querying Across Genres for Medical Claims in News

Nov 2020

Empirical Methods in Natural Language Processing (EMNLP 2020)

▲ Projects

- Comment Toxicity Detection: Achieved an AUC score of 0.98+ with creative pre-processing techniques coupled with Bi-GRU & BERT for multi-class classification of toxicity levels in Wikipedia comments.
- Sentence Representations: Understood sentence representations using Perturbation Analysis on sentiment analysis task with IMDb movie reviews using neural networks, DAN and GRU.
- Word Embeddings: Reported comparisons of word embeddings learnt using Cross Entropy Loss v/s Noise Contrastive Estimation Loss by measuring their performance on the word analogy task.
- Video Action Classification: Compared LSTM v/s SVM for action classification task on the UCF101 dataset. Leveraged Transfer Learning to compute features for 60000 video frames with limited compute resources.
- 3D Pose Estimation: Estimated 3D pose co-ordinates of humans by regressing over their 2D co-ordinates only using Deep Neural Networks. Experimented with Kalman Filters for correcting noisy measurements due to faulty sensors.
- Chess Rating Prediction: Evaluated Random Forests, Gradient Boosting over novel features extracted from moves in 100k chess games to predict Elo ratings. Feature extraction run on distributed nodes using OpenMP for 15x speed.
- Understanding Infant Mortality: Applied Linear Regression to suggest priority actions to reduce Infant Mortality Rate based on 16.8GB of health & social records of 3M women using Dask & Apache Spark for parallel computation.

EXPERIENCE

PlayStation, Software Engineer Intern

May 2020 - Aug 2020

- \circ Built Deep Learning pipeline to improve perceived video quality by enhancing regions with text. Reduced inference time by $\sim 75\%$ for text detection under challenging constraints without reducing precision & recall.
- \circ Evaluated multiple lightweight backbone networks, ResNet, PVANet, MobileNetV2, and techniques like quanitzation, post-processing optimization to further improve inference speed by 2x-4x.
- \circ Developed a web dashboard using Flask, HTML & JavaScript, to help identify incorrect annotations which helped increase precision & recall of text detection by 1-2%.

JP Morgan Chase & Co., Associate Software Engineer

May 2017 - Jul 2019

- \circ Redesigned server-side services to support web-based client & streaming of real-time data using WebSockets. Improved app performance via $\sim 70\%$ reduction in payload size & boosted reliability using micro-services architecture with Spring Cloud.
- Developed non-intrusive ways to gather, store, visualize and analyze metrics using Elastic, Logstash & Kibana for latency, in the order of 100ms, across micro-services to identify bottlenecks and performance improvement options.

LiveFiesta, Lead Android Developer

Jun 2016 - Jan 2017

• Led a team of 4 in the design & development of an Android application with an average rating of 4.5+ for customers to book tickets to events. Leveraged MVP architecture, Dependency Injection & TDD using RxJava, Dagger & Espresso.

7 TECHNICAL SKILLS

- Languages: Proficient in Python & Java, Familiar with C & C++, JavaScript, SQL
- Frameworks & Libraries: TensorFlow, PyTorch, scikit-learn, NLTK, NumPy, pandas, Spring, Android, Docker, Flask
- Build Tools: Git, Gradle, Maven, Jenkins, Bash, Linux, Google Cloud Platform(GCP)