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LinkedIn Github

#### Education

 $\bullet$  National Institute of Technology - Surat

B. Tech Electronics & Communication Engineering: GPA 3.06/4.00

Gujarat, India August 2012 - May 2016

### Work Experience

• Chubb Insurance

Bengaluru, India
March 2021 - Present

Analyst (full time position)

- Building a website searching and scraping solution for Chubb's potential clients
- Developing a summarization model as a part of digital underwriter assistant application that summarizes business operations for Chubb's potential clients.
- Summarization model uses transformer model *BART*, with included NER removal & tagging to provide precise & trustworthy summaries.

### • BridgeI2I Analytics

Bengaluru, India

Senior Associate Consultant (full time position)

Jan 2019 - Feb 2021

- Individually developed a Standard Industrial Classification website-classifier; solving a 1200-class multi-label, multi-class classification problem using language representation model BERT. Model performance at par with humans, & improved over current in-production model by a lift of 15%
- Re-purposed BERT by removing it's limitation of 512 words, added confidence calibration (temperature scaling), added gold loss correction to deal with noisy & untrusted labels, added loss balancing to deal with severe data imbalance. Used Tensor Processing Units to scale up training process to a million records
- Received 'Over & Above Award' for exemplary work under tight constraints

Associate Consultant (full time position)

Dec 2017 - Sept 2018

- Implemented *xgboost* models to predict loan foreclosure at different time intervals to boost customer retention & decrease foreclosure rates by 7.5% by customizing loans according to risk predictions
- Collaborated with 2 team members to form framework for proactive detection of dealer-side fraud for a consumer durable lending business

• Arya.ai Mumbai, India

Machine Learning Research Scientist (full time position)

December 2016 - November 2017

- Built a large scale cheque automation system wherein fields such as date, amount, etc is extracted using CNNs. Signature is localized through YOLO like architecture. System processes 100k cheques in 4 hours & decreases the need for human involvement by 70%
- Trained & deployed face recognition API service using FaceNet with accuracy 90%
- Put into practice an OCR system using Tesseract OCR which used a mix of neural networks. Added rule based systems to handle very noisy documents with an accuracy of 84%
- Recruited data scientists for the organization across 4 recruitment drives, interviewed 30+ candidates

# • Mu Sigma

Bengaluru, India

Trainee Decision Scientist (full time position)

May 2016 - November 2016

- Coded a decision tree classifier in Scala for an internally used machine learning library
- Leveraged Spark to allow the classifier to handle incremental big data in a distributed fashion

### **Projects and Contributions**

- (Undergraduate Project) Diabetic Retinopathy Classification September 2015 April 2016
  - Wrote a CNN from scratch using Theano that classified images of eyes in 5 levels of diabetes.
     Handled severe class imbalance & noise in image data
  - Worked under the guidance of Dr. Kishor Upla & Dr. Mukesh Zaveri

# • Text generation using Recursive & Reccurent Nets

May 2015 - August 2015

- Developed a custom network - using a mix of Recurrent & Recursive neural networks created to generate text, built upon on Karpathy's Char-RNN

## Skills

Languages: Python, R, Scala, C/C++, SQL, Latex. Libraries: TensorFlow, OpenCV, Scikit-Learn, Pandas, NLTK, Pyspark, GCP, Theano. Platforms: Apache Spark, Google Cloud Project, Azure Databricks, AWS