Daniel D'souza

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EDUCATION

University of Michigan   Ann Arbor, MI | May 2018
MSc. Electrical and Computer Engineering(Machine Learning)
Certificate of Graduate Studies (Data Science)

Visvesvaraya Technological University   Belgaum, India | July 2013
BE. Electronics and Communications Engineering

PUBLICATIONS

Articles in peer-reviewed Journals

ESTIMATING EXAMPLE DIFFICULTY USING VARIANCE OF GRADIENTS ⬀   CVPR 2022
Chirag Agarwal*, Daniel D'souza*, Sara Hooker

MASAKHANER: NAMED ENTITY RECOGNITION FOR AFRICAN LANGUAGES ⬀   TACL 2021
David Ifeoluwa Adelani, Jade Abbott, Graham Neubig, Daniel D'souza, ...

Articles in peer-reviewed Workshop Proceedings

A TALE OF TWO LONG TAILS ⬀   Uncertainty in Deep Learning Workshop, ICML 2021
Daniel D'souza, Zach Nussbaum, Chirag Agarwal, Sara Hooker

WORK EXPERIENCE

PROQUEST LLC | Sr.Data Scientist   Ann Arbor, MI | June 2018 – Current

- Medical Text Processing Pipeline for Pharmacovigilance
    - **Led Product Strategy and Development** for the company's first ML Service
    - Curated Data for Text Classification and Named Entity Recognition Systems
    - Built Metrics Dashboard for Classification/Ranking Tasks using Streamlit
    - Case Report Discovery for major Pharma client **improved by 120%**
- Automated Indexing using MeSH Vocabulary
    - Implemented custom architecture in PyTorch
    - Implemented Data Processing Jobs in AWS Sagemaker
    - Implemented Selenium Data Scrapers to collect additional public data for pre-training
- Mentorship/Guidance
    - Mentored student-teams from the University of Michigan through MDP(Multi Disciplinary Program)
    - Mentored ML interns from 2018-2022

DELPHI | Software Engineer   Bangalore, India | August 2013 – July 2016

- Modelling and Simulation of Fuel Strategy functionalities for DAF Trucks, Sweden
- Optimization of Engine and Air Management Features for Hyundai Motors
- SPOT Award for reporting and fixing a critical fuel library block overflow issue in a major DAF release.

RESEARCH AFFILIATIONS

ML COLLECTIVE | ML Researcher | Jan 2021 – Current
MASAKHANE | ML Researcher | June 2020 – Jan 2021

SKILLS

ML Frameworks: Pytorch, Tensorflow, Scikit-Learn   **Technology:** AWS, GCP