DHANYA LAKSHMI

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https://github.com/Runefeather

ACADEMIC QUALIFICATIONS

Cornell Tech, New York *May 2021*

- **Master of Engineering in Computer Science** | GPA: 4.07
- Relevant Coursework: Applied Machine Learning, Machine Learning Engineering, Deep Learning, Natural Language Processing, Optimization Methods

Singapore University of Technology and Design (SUTD), Singapore *2014 – 2017*

- **Bachelor of Engineering (Information Systems Technology and Design)**
- Relevant Coursework: Machine Learning, Artificial Intelligence, Security, Optimization, The Analytics Edge

TECHNICAL SKILLS

Coding Languages: Python, Scala, JavaScript, Powershell, C#, Bash, C++
Other Tools: GCP, Apache Beam, Dataflow, Kubeflow, TensorFlow, AWS, Burp Suite Pro, Azure

WORK EXPERIENCE

Twitter, ML Engineer II, ML Ethics, Transparency, and Accountability, New York *July 2021 – Present*

- Tested and built metrics to quantify the disparate share of attention received by a few accounts in experiments launched by different teams. A dashboard was also built to visualize the statistics across teams.
- Designed a pipeline with tools such as Dataflow, Apache Beam, and Kubeflow to consolidate information about ML assets across various teams at Twitter in a dashboard that is updated daily.
- Implementing model audit methodologies for company-wide risk assessments and aid ML practitioners in identifying and remediating bias within their algorithms.

Ernst & Young, Senior Associate, Cybersecurity Consulting, Singapore *October 2017 – August 2020*

- Lead teams and performed red team assessments, application testing, source code review, and network penetration tests for well-known banks, government agencies, private companies, and educational institutions.
- Engineered workflows and developed scripts to automate testing using Python and worked with teams to create material and conduct training for clients on topics such as red team testing and cloud security in AWS and Azure.

ACADEMIC PROJECTS

Identifying and Unlearning Gender Bias in Models, Cornell Tech (Python, TensorFlow) *Spring 2021*

- Using Adversarial networks and GANs to identify and unlearn unintentional bias present in ML models and datasets used for purposes such as task identification.

Fake Tweet Classification, Cornell Tech (Python, TensorFlow, Keras) *Fall 2020*

- Identified fake tweets through a process that involved collecting data, building and iterating models, and testing on a dataset created from real-time tweets. Designed and compared various models using Tensorflow, including a CNN, an SVM, an LSTM, and a Transformer, and obtained a maximum accuracy of 75%.

PyTorch Reimplementation, Cornell Tech (Python, Numba) *Fall 2020*

- Built MiniTorch from scratch by implementing basic arithmetic and tensor operations like matrix multiplication and convolution, with CUDA-optimized code to obtained 95.6% accuracy on MNIST dataset with a neural network.

CO-CURRICULAR ACTIVITIES

Break Through Tech AI, Mentor, New York *September 2022 – Present*

- Mentoring a group of undergraduate women and underrepresented students and helping them begin their job search, prepare for job interviews, and be equipped for working in the tech industry.

ACCOMPLISHMENTS

OpenCV Phase 1 Finalist *March 2021*
Offensive Security Certified Professional (OSCP) *April 2018*
Winner, IDC Robocon 2015 Championship (https://idcrobocon2015.sutd.edu.sg/) *July 2015*