Vijay Iyer

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Kaggle profile, Linkedin profile

EDUCATION

Indiana University, BLOOMINGTON, IN — JANUARY, 2021 - DECEMBER, 2022
Master's Degree in Computer Science — CUMULATIVE GPA: 3.70/4.00

Vishwakarma Institute of Technology, PUNE, INDIA — JULY, 2012 - MAY, 2016
Bachelor of Technology in Electronics and Telecommunication Engineering — CPI: 8.51/10.00

WORK EXPERIENCE

Microsoft Corporation, HYDERABAD, INDIA — NOVEMBER, 2016 - OCTOBER, 2020
Associate Consultant

- Improved Coverage and Accuracy of Functional/User Test cases for Applications Under Test (Client's Application) by writing Automation Test Scripts using Frameworks like CodedUI, Selenium WebDriver
- Developed Methodology for writing test scripts for API testing using JSON and Http Request/Response related libraries provided by .NET
- Helped manage DevOps pipeline for continuous testing of Application Under Test in the project in an Agile Framework

SKILLS

- **Programming Languages -** Python, C#, Racket, C, JavaScript
- **Machine Learning Frameworks/Libraries -** Scikit-Learn, Keras, PyTorch, Numpy, Pandas, NLTK
- **Databases -** SQL Server, MongoDB, SQLite
- **Development Environments & Tools -** PyCharm, VSCode, Visual Studio, Git, Anaconda
- **UI** - HTML, CSS, AngularJS, React, JQuery

PROJECTS

MS Projects

Product Recommender System for Amazon Products dataset — *Spring 2021*

- Implemented Item based Collaborative filtering using k Nearest Neighbors Algorithm with different similarity metrics to compare neighbor distances. Then, the nearest N item profiles were recommended to Test Users
- Implemented Low-rank Matrix Factorization using Stochastic Gradient Descent, inspired by SVD Matrix Factorization, to estimate factors whose product approximated the User-Ratings Matrix. Then, the factors were treated as User and Item profiles, using which, for any user, top N rated new items were recommended

Detecting Genome labels in raw Biomedical text dataset — *LAIDEL Practicum, Spring 2021*

- Classified Genome label that a given body of text was referring to using BERT and BioBERT (BERT fine-tuned on bio-medical text documents like PubMed)
- Implemented Baseline Models like Logistic Regression, SVM, FeedForward Neural Network for comparison with best performing BERT models
- Achieved above 85% accuracy on test sets after cross-validation

Hidden Markov Model Implementations — *Spring 2021*

- Finding most likely POS Tag for each word of Sentences in Brown Corpus
- Finding most likely sequence of characters seen in noisy OCR Images
- Find most likely points of Ridge line in Images of Mountain Ranges

Python Compiler — *Fall 2021*

- Developed Python subset Compiler in Python as part of Coursework Assignments. Wrote code for all Intermediate passes from Parsed AST using Python built-in AST module to x86 Assembly Language.
- Added Language Features like Functions, Tuples, Lambda expressions, While Loops, if-then-else statements and expressions

Undergraduate Projects

Image Retrieval — *2015-2016*

Implemented and Compared Machine Learning Algorithms for Image Retrieval Task on CIFAR-10 as well Custom Rock Images Dataset using the following algorithms : KNN, Feedforward Neural Network, Convolutional Neural Networks