Anantvir Singh

Machine Learning Engineer

CONTACT

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PROFILE

GITHUB : **https://github.com/anantvir**

Dedicated and resolute Machine Learning Engineer with experience using object oriented design techniques and programming languages, machine learning/data mining algorithms.
Strong team player & a clear communicator - I am adept at gaining the trust of my coworkers & working cohesively to maximize team output.
Methodical worker with the versatility to work with others or individually, to solve complex problems completely and efficiently. Results oriented with a strong desire to take projects from begining to end.

- Proficient in Data Structures, Algorithm Design and Statistical Learning Theory
- Good theoretical and practical undertsanding of Machine Learning and Data Mining algorithms
- Proficient in end to end design and development of Machine Learning and Deep Learning systems
- Understanding of architecture, design and development of Client-Server Web Applications and **Spring MVC**, **N-Tier Architecture.**
- Understanding of application development in **React.js** using Webpack, React-Router, Redux, Firebase.
- Understanding of core **Principles and Practices in Software Engineering**

- ***Course work -*** *Machine Learning, Data Mining, Statistical Learning, Algorithm Design and Analysis, Advanced Topics in Artificial Intelligence: Neural Networks and Deep Learning, Statistical Research Methods, Software Engineering, Computer Networks, HPC for Scientific Applications, Computer Architecture*

TECHNOLOGIES

Python	●●●●●●●●●○
Tensorflow	●●●●●●●●○○
PyTorch	●●●●●●○○○○
Javascript	●●●○○○○○○○
Elasticsearch	●●●●●●●○○○
Numpy/Pandas	●●●●●●●○○○
React.js	●●●○○○○○○○
Qlik Sense	●●●●●○○○○○

EDUCATION

Master of Science **GPA: 3.93/4.00**
Computer Science
University of Delaware (May 2020)

Bachelor of Technology **CGPA: 7.4/10.0**
Electronics & Comm. Engineering
Guru Nanak Dev University, India (June 2014)

EXPERIENCE

University of Delaware
CMMS Administrator Assistant *April 2019 - Present*
Environment: Qlik Sense, MS SQL Server, DB Visualizer, MS Excel

Infowiz Software Solutions, India
Software Developer *July 2017 - May 2018*
Environment : Java 7, Spring, Hibernate, Oracle, JavaScript

Tata Consultancy Services, India
Systems Engineer(Developer) *Jan 2015 - March 2017*
Environment : JEE 7, Spring core, Spring MVC, Hibernate

ACADEMIC PROJECTS

Generative & Retrieval based Conversational Models in Tensorflow *Dec 2019 - Present*
• Implementing a Dual LSTM encoder model from a publication by McGill University using Elasticsearch, Node.js.

Contributed to nltk (An open source NLP library) *Fall 2019*
•Resolved 3 bugs in a large codebase following all Soft. Engg. Principles and Practices as a project for the course

Eigenfaces: Face Recognition using PCA and Eigen Decomposition *Fall 2019*
• Using facial signatures from projecting Principal Components onto reduced Eigenvector Space

Dense Artificial Neural Network for MNIST Classification *Fall 2019*
• Programmed a scalable Neural Network with vectorized mini batch backpropagation and Optimization using Stochastic GD, Conjugate Gradients, Steepest Descent

Facial Recognition using Deep Learning with Facenet and SVM *Spring 2019*
• Learned and implemented the concept from a published research paper by Google (Tensorflow+dlib+Python)

Detecting and Localizing Pneumonia from Chest X-ray Scans *Spring 2019*
• Classification using Keras with Tensorflow backend and Python. Implemented Localization using class Activation maps

Optimization and Parallelization of Sorting and Searching Algorithms *Fall 2018*
• Implemented 7 and parallelized 2 algorithms in Python and applied O1,O2,O3 optimizations in gcc resulting in approx 40% reduction in runtime

PUBLICATIONS

A comparative study of different machine learning algorithms for disease prediction *July 2017*
•DOI : 10.23956/ijarcsse/V7I7/0177
ISSN: 2277-128X (Volume-7, Issue-7)