

Viraj Mavani

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EDUCATION

The University of Texas at Dallas

May, 2020

M.S., Computer Science

GPA: 4.00 out of 4.00

Honors/Scholarship(s): Jonsson School Graduate Scholarship; Prodigy Finance Graduate Scholarship

Coursework: Machine Learning, Computer Vision, Database Design, Natural Language Processing, Design and Analysis of Computer Algorithms, Web Programming Languages

L.D. College of Engineering

June, 2018

B.Engg., Electronics and Communication Engineering

GPA: 8.98 out of 10.00

Coursework: Computer Programming and Utilization, Microprocessor Interfacing, Microcontroller Interfacing, Advanced Microprocessors, VLSI, Digital Signal Processing

SKILLS

Programming/Scripting Languages: Python, C, C++, Java, JavaScript, MATLAB, SQL, Embedded C

Applications, Software Frameworks and Tools: OpenCV, Tensorflow, PyTorch, Keras, Pandas, Microsoft Azure, Databricks, Apache Spark, Scikit-learn, UNIX, Git, SQLite, MySQL, LaTeX

Domain Knowledge: Machine Learning, Computer Vision, Data Structures and Advanced Algorithms, Database Design, Cloud Computing, Distributed Computing

WORK EXPERIENCE

7-Eleven Inc.

May, 2019 – August, 2019

Machine Learning Intern

- Machine learning enabled market analysis to model customer behavior in the retail sector using big-data and cloud technologies.

SeRViCE Lab, The University of Texas at Dallas

September, 2018 – May, 2019

Student Worker by Research

- Deep Learning for Visual SLAM by solving the problem of loop-closure in a self-driving vehicle setting

Meditab Software Inc.

March, 2018 – June, 2018

Software Development Engineer Intern (Artificial Intelligence)

- Designed a computer vision based system for Traffic Surveillance

Indian Institute of Technology (IIT), Gandhinagar

May, 2017 – June, 2018

Research Intern

- Research on Facial Expression Recognition using Deep Learning and Crowd Motion Analysis.

ACADEMIC PROJECTS

- Anno-Mage: A Semi Automatic Image Annotation Tool March, 2018 – May, 2019
 - A semi-automatic image annotation tool that incorporates an existing state-of-the-art object detection model called RetinaNet to show suggestions of 80 common object classes to speed up the process.
 - Davisbase Engine February, 2019 – April, 2019
 - A complete SQL RDBMS engine written in C++17 with B+ tree file indexing.
 - Operating Systems September, 2018 – December, 2018
 - Multi-threaded analysis for matrix multiplication of 10000x10000 sized matrices and synchronization using semaphores.
 - UNIXv6 filesystem simulation in C with file I/O functions
 - **Other Academic Projects**: Vision based Traffic Surveillance System; Facial Expression Recognition using CNNs; Library Management System (MySQL, Java, Swing); Heart disease detection with 95.08% accuracy (Kaggle dataset); UNIXv6 File System Implementation; Multi-threaded analysis of large matrix multiplication
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LEADERSHIP & ORGANIZATIONS

IEEE Student Branch, L.D. College of Engineering – Student Branch Chair

April, 2017 – April, 2018

Vox Populi Magazine, L.D. College of Engineering – Editor-in-Chief

March, 2015 – June, 2018

PUBLICATIONS

- "SAF-BAGE: Salient Approach for Facial Soft-Biometric Classification – Age, Gender, and Facial Expression." In Proceedings of the Winter Conference on Applications of Computer Vision (WACV), 2019.