

Website: adityavyasbme.github.io | LinkedIn - adityavyasbme adityavyas1603@gmail.com | 949.664.1411 | avyas2@uci.edu

EDUCATION

IRVINE. USA

MS IN BIOMEDICAL ENGINEERING Sept 2018-June 2020 GPA: 3.63 / 4.0

SHRIGS INSTITUTE OF TECH. April 2019 - June 2019 | Irvine, California AND SCI. INDORE, INDIA

BE IN BIOMEDICAL ENGINEERING

Honors Degree Aug 2013 - Aug 2017 GPA: 7.63 / 10

COURSEWORK

GRADUATE

Neural Networks and Deep Learning Sensory Motor Systems **Organ Transport Systems** Intro To Clinical Medicine Applied Engineering Math I, II

UNDERGRADUATE

Artificial Neural Network Medical Image Processing Programming Tools and Technique System Designing with Microprocessors **Bio-Informatics Bio-Mechanics** Biomedical Statistical Signal Processing

SKILLS

TECHNICAL

Python • R • Java • Matlab • LATEX C • C++ • HyperMesh • HTML CorelDraw • PageMaker • Muse After Effects • Premiere Pro OS:

Windows • Mac • Linux

INTERPERSONAL

Problem Solving • Teamwork Time Management • Work Ethic Public Speaking • Critical Thinking

INTERESTS

Artificial Intelligence • Machine Learning • Data Science

 Biomedical Computational Technologies • Computer Vision

EXPERIENCE

UNIVERSITY OF CALIFORNIA MIDMARK CORPORATION | IMAGE PROCESSING/ML RESEARCH INTERN

June 2019 - September 2019 | Torrance, California

- Used Stereo cameras for Distance/Height estimation of standing subject.
- Integrated Machine Learning model to predict Height of disabled person.

UC IRVINE | GRADUATE TEACHING ASSISTANT

• Assisted the faculty members by conducting discussions, midterm and guiz sections for the undergraduate course 'Introduction to Software Engineering'.

IICAE | RESEARCH ASSISTANT

December 2017 - February 2018 | Indore, India

- Performed Finite Element Analysis (FEA) of the femur bone for bone-breaking prediction
- Gathered CT Scans data from several hospitals to increase study power
- Also, Completed professional training program in FEA

CHL HOSPITAL | BIOMEDICAL ENGINEER ASSISTANT

June 2016 - July 2016 | Indore, India

- Assisted in installation, calibration, and maintenance of medical equipment
- Gained hands-on experience in hospital management system

PROJECTS

INVISIBILITY CLOAK GUI | INDEPENDENT PROJECT

- Created a GUI to generate a invisibility cloak effect in a video.
- Used OpenCV for Image Processing and Tkinter for GUI in python

SNAKE BOT | Independent Project

Used Genetic Algorithm and Reinforcement Learning to play Snake Game

SWAY ANALYSIS | ACADEMIC PROJECT

- Formulated an analysis method to distinguish posture deformities
- Recorded videos of a person standing still for one minute and coordinated with 10 subjects
- Developed an image processing algorithm with fellow students

HEART BEAT SENSOR | ACADEMIC PROJECT

- Built an embedded system to measure heart rate
- Investigated components and methods to reduce cost and size of the system

FACEBOOK PAGE POST SCHEDULER | INDEPENDENT PROJECT

- Created a JAVA application to automatically schedule posts on Facebook.
- Integrated a web crawler to increase the efficiency and to reduced the time to schedule a post

CERTIFICATIONS

- 'Excellence in Engineering Communications' Activate to Captivate program, UCI
- 'Improv For Teaching', Activate to Captivate program, UCI
- 'Machine Learning A-Z: Hands-on Python and R in Data Science', Udemy