VIVEK MADHAVARAM
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INTERESTS

My Interest is in the research related to Geometric Deep Learning, 3D Computer Vision.

EDUCATION

MS by Research in Computer Science and Engineering   **Jul 2022 - Present**

International Institute of Information Technology, Hyderabad, Telangana, India
CGPA – 9.17

Bachelor of Technology in Computer Science and Engineering   **Aug 2015 - May 2019**

VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, Telangana, India
CGPA - 9.22

Board of Intermediate Education   **Jun 2013 - Mar 2015**

Sree Chaitanya Junior College, Kukatpally, Hyderabad, Telangana, India
Percent – 96.1%

PROFESSIONAL EXPERIENCE

Machine Learning Lab, IIITH, Hyderabad, India   **Jan 2023 – Present**
Role: Research Scholar

Description:
> The project deals with a blend of 3D diffusion models and grounding mechanism that results in scene edits. It performs tasks like inserting, replacing, deleting and transforming an object in a scene. This work has been submitted to A* conference. Currently, I am delving into 3D projects that deal with human motion in a 3D scene.

Hexagon Capability Center India, Hyderabad, India   **June 2019 – July 2022**
Role: Senior Software Engineer

Description:
> The Project deals with web/ mobile application that is used for getting complete insight into construction project for better tracking in private sector.

Roles & Responsibilities:
- Involved in requirement gathering.
- Worked closely with product owners to perform detailed analysis of business and technical requirements.
- Created the design document as per the requirement.

- Developed custom user interfaces using Bootstrap and JavaScript for capturing various customer enquiries and Implemented logic for displaying project details based on customer input.
- Developed Cascading Style Sheets (CSS) for creating effects in web pages.
- Prepared the Test case and Test plan to test the changes.
- Code the changes as per the design and perform Unit Testing.
- Provided training to the internal business users to use the application.
- Creating marketing videos and documents for sales team to demonstrate the product to customers.
- Create Beta Testing Document describing the process to test the system for customers.
- Managed team of 3 and responsible for work assignments, scheduling meetings and tracking progress.
- Automating the process of cleaning up the data to meet industrial specifications.
- Developed automation tools in python to reduce the manual effort and labor hours.
- Involved in competitor analysis.
- Designed 3D Autodesk Revit/BricsCAD models required for project demonstration.

Environment: HTML, CSS, Bootstrap, firebase, Revit, BricsCAD.

TECHNICAL PROFICIENCY

DATABASES	**SQL SERVER 2008**
WEB TECHNOLOGIES	**HTML, CSS, JavaScript**
LANGUAGES	**PL/SQL, C, C++, JAVA, Python**
WEB FRAMEWORK	**REACT, Bootstrap**
OPERATING SYSTEM	**Windows 10/8/7, Raspbian OS**
EPM	**Primavera P6**
CAD	**Autodesk Revit, BricsCAD**

ACADEMIC PROJECTS

Blind Vision, Graduate Directed Project   **Dec 2018-Apr 2019**

   VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, India

Description:

   Device used for detection of objects such as people, car, pets, etc. by supervised learning algorithms and text to speech for blind people.

- Prioritizing the features to be implemented.
- Managing team based on their strengths and weakness.
- Performed Unit and Integration testing to measure accuracy.

Environment: Python, Raspbian OS

Student performance analysis, Graduate Directed Project   **Aug 2018-Dec 2019**

   VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, India

Description:

Project to analyze the factors that affect the performance of students. These factors include scores in entrance tests, internal tests, etc.

- Implemented two out of four modules that analyze the student performance.
- Designing the user interface to display charts and analysis reports.
- Refined and prepared the data manually to ensure its suitability for analysis.

Environment: Python, Matlab

Smart Latch, Workshop Project   **Mar 2017-May 2017**

VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, India

Description:

IOT Device for security purpose of House that captures the picture of person ringing bell and reports to house owner. Device opens the door based on owner response.

- Planning the implementation within training days.
- Implementing the core components in python and deploying them onto raspberry pi.
- Performed Unit and Integration testing to measure accuracy.

Environment: Python, Raspbian OS

ACTIVITIES AND ORGANIZATIONS

- Won first prize in hackathon organized by Hexagon Capability Centre India, Hyderabad.
- Awarded as Star performer in at Hexagon Capability Centre India, Hyderabad
- One of the top 10 teams in global hackathon organized by Hexagon Capability Centre India, Hyderabad.
- Won best project award for the academic project during Under Graduation program.
- Member of CSI community and was a part of various technical events across various educational institutions.
- Participated in several athletic events organized by Coca-Cola in Hyderabad.
- Worked as TA coordinator for AI/ML workshop conducted at IIIT Hyderabad.
- I was an instructor for few topics at a 3D Vision summer school at IIIT Hyderabad.