RAGINI BHARDWAJ

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Education

University of Dayton, Master of Science – Computer Science, **GPA: 3.72**   **Graduating-2021 (Ongoing)**
Relevant Coursework: Advance Computer Vision, Image Processing, Machine Learning, Data Analysis, Cloud Computing, Algorithm Designing, Artificial Intelligence, Database Systems

SRM University, Bachelor of Technology–Computer Science   **May 2019**
Relevant Coursework: Fuzzy Logics, Soft Computing, Algorithm Designing, Operating Systems, Neural Networks

Skills

Machine Learning	: Classification, Regression, Clustering, Neural Networks, LSTM, RNN, Trees, Ensemble
Programming Languages	: Python3.9, Java, C, C++, SQL, GO Lang, Node.js
Tools & Technologies	**:** Hadoop, Docker, MySQL, Visual Studio, OpenCV, Matlab
Web Technology and Visualization	: HTML5, CSS3, XML, JavaScript, JSP
Libraries Known	: Pandas, NumPy, Matplotlib, Keras, Tenserflow, plotly

Relevant Experience.

Education and Information Delivery Assistant, University of Dayton Libraries, Dayton, OH   **PRESENT**
- Delivered information and implemented necessary actions in the Library
- Solved IT and Technical issues in the computer systems
- Assisted in various Library errands pertaining to finding the books in the catalog of a relevant author, check-in and check-out of the books.

Research Assistant, Advanced Operating Systems, Department of Computer Science   **Apr 2016 – Dec 2016**
- Assisted in setting up and performing method development and validation of various analytes in a variety of matrices.

Software Developer Intern, HCLInfosystems, India   **Jun 2017 – Sept 2017**
- Created a web application using .Net platform for visually impaired people where they could access lectures, tests, tests results, study modules vocally without typing.
- Worked in a collaborative environment for all aspects of product development (design, implementation, test, and maintenance support).

Software Developer Intern, GIS Consortium India PvtLtd., India   **Feb 2018 – Apr 2018**
- Assisted the Network Management Systems team with documentation, specifications, designs, test plans, proposals, development and testing.
- Participated in software development using Agile/Scrum development process.

Projects

Driver Assistance System (AI)   **Oct 2019**
- Incorporated Road Lane Detection and Vehicle Detection which can be implemented in self-driving cars or automotive driving.
- Used OpenCV image analysis techniques to identify lines including Hough Transforms and Canny edge detection.
- Build and trained a deep neural network to classify traffic signs using TensorFlow.
- Perspective transform mean conversion of 3D world image to 2D image.
- Distortion Correction, Image Rectification, Color Transforms, Gradient Threshold were implemented using deep neural network.
- Yolo Framework: The algorithm applies a neural Network to an entire image. The network divides the image into an Sx Sgrid and comes up with bounding boxes which are the boxes drawn around the images and predicted probability for each of these regions.

Vocalize Vision Software Application   **Oct 2018**
- Implemented for visually impaired people to work on this efficacious application which subsumes test modules, test results, lecture modules based on the learner's interest.
- Implemented on .Net platform using C#.
- Instilled with voice communication between the user and the application.

Computer Vision Application PCA   **Sept 2019**
- Principal Component Analysis used on extracting the font from the image.
- Edge detection masks applied to images.
- Adaptive Gaussian noise removal with 2D Wiener filter.

WebChat System with Authentication (Cloud Computing and Applications)   **June 2020**
- Developed a WebChat System using Node.js with two microservices deployed on Heroku and Microsoft Azure
- Built the connection with Mongo DB for database which subsumed all the credentials of the user
- Applied eclectic validations for Registration and Signing in.
- Various users could communicate with one another irrespective of the locations.

Extracurricular

1st Delhi State Belt Wrestling Championship (Winner)	**Aug 2015**
District Level Handball Tournament (Govt. of N.C.T. Delhi) (Winner)	**Sept 2015**
District Level Netball Tournament (Govt. of N.C.T. Delhi) (1st Runner up)	**Sept 2015**
Guitarist	**Apr 2017-Present**
Participated in Royal Enfield Ride for Good-One Ride Mountainbike Marathon	**Aug 2017,2018,2019**
Social Worker in NGO (Sai Smriti Old-Age Home)	**2015-Present**
Social Worker in NGO (Hope Foundation)	**2017-2019**
Self-Social Worker for "Shri Sai Feedfor Penurious"	**2014-Present**

Languages: English, French