

# HARSHITH MAKKAPATI

8181 Fannin St, Houston, TX - 77054

☎ (832)969-4450 ✉ [harshith200127@gmail.com](mailto:harshith200127@gmail.com) [linkedin.com/in/hmakkapa/](https://www.linkedin.com/in/hmakkapa/) [github.com/harshith200127](https://github.com/harshith200127)

## Education

### University of Houston, Houston, TX

AUG 2023 - DEC 2024

Master of Computer Science – Coursework: Visualization, Data Analysis, Cloud Computing

CGPA: 3.77

### Jawaharlal Nehru Technological University, Hyderabad, India.

MAY 2019 - AUG 2023

Bachelors in Computer Science – Coursework: Object Oriented Programming, Database, DSA

CGPA: 9.07/10

## Technical Skills

**Skills:** Web Development, DBMS, Excel, User modeling, MS Office, Software Development Methodology

**Languages:** Java, Python, R, HTML/CSS, JavaScript, DSA, Graph Algorithms

**Database and Developer Tools:** MySQL, VS Code, Github, Git, MongoDB

**Libraries:** Numpy, Pandas, Matplotlib, Scikit, TensorFlow, PyTorch, R

## Experience

### University of Houston

DEC 2023 – Present

Admissions Department

Houston, TX

- Led projects by collecting, cleaning, and analyzing Undergraduate Students data using tools including Excel and SQL.

### Ace Ventures Pvt Ltd

AUG 2022 – JAN 2023

Front End Developer Intern

Hyderabad, India

- Deployed widely recognized security protocols to protect customer data, ensuring integrity and confidentiality.
- Engineered and maintained a login system using a blend of front-end technologies (HTML, CSS, JavaScript) and back-end technologies (Node.js, MongoDB).
- Implemented robust error-handling strategies aimed at reducing user frustration and minimizing support inquiries encountered during the login process.

## Projects

### Deep Learning and Sentiment Analysis Based Cryptocurrency Price Prediction | *NLP, PyTorch, SQL* May 2023

- Enhanced a machine learning model, elevating accuracy rates to an exceptional 95prediction of cryptocurrency prices.
- Engineered a model capable of providing valuable insights into general price trends and directional expectations within cryptocurrency market.

### 3D Visualization for Brain Imaging | *PyQt, VTK, ITK Libraries, ParaView*

DEC 2023

- Led development of advanced brain tumor segmentation method: two-step process with binary mask generation and Connected Component analysis for accuracy.
- Created intuitive interface with customizable parameters for enhanced visualization, including connected component filters and opacity.
- **Achieved a 20% increase** in segmentation accuracy compared to previous methods.

### Traffic Sign Classifier | *HTML/CSS, Python, JS, OpenCV, Tensorflow*

SEP 2022

- Led team analyzing road accidents, developed Convolutional Neural Network model for traffic sign detection.
- Inclusion of Traffic Recognition System in the ADAS features of cars.
- **Reduced false positives by 25%** through fine-tuning of the CNN model.

## Publications

### An Integrated MCDM Approach for Cloud Service Selection Based on TOPSIS and BWM Dec 2022

International Journal of Computer Engineering in Research Trends(IJCERT)

- This Study aimed to assign performance factor for each service provided by cloud and ranks it as a whole using MCDM algorithms.

## Certification

- Google Cloud Engineer Program.
- Oracle Database Programming with SQL
- Artificial Intelligence by SkillUp.