# Shamal Shaikh

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## **EDUCATION**

## National Institute of Technology, Warangal, India

Aug 2018 - Present

Bachelor of Technology in Computer Science and Engineering

CGPA: 8.72/10 (up to 7<sup>th</sup> semester).

Active member of Undergraduate Research Association, IEEE Student Branch, and Computer Science and Engineering Association.

**Relevant Coursework:** Data structures and Algorithms, Database Management System, Operating Systems, Computer Networks, Machine learning, and Data Science.

### PROFESSIONAL EXPERIENCE

#### **Oracle India Pvt. Limited**

Summer Intern

May 2021 - July 2021

- Designed and developed a framework for handling Data Guard sync across primary and standby Container-DBs, when Primary-DB operations (create, delete, unplug-plug and clone) are performed. Used Java, Perl, RMAN, DGMGRL, and Oracle Enterprise Manager.
- Performed a proof of concept for identifying the right approach to rectify the breakdown of data guard sync with zero downtime.
- Tested and certified patches for Cloning of Non-Container-DB and Primary-DB in a Transparent Data Encryption (TDE) environment.

## Web and Software Development Cell, National Institute of Technology, Warangal

Sep 2019 - Sep 2020

Web Developer

- Designed and implemented the Conference Management System section of the institute website, enabling faculty to register conferences and events conducted on campus.
- Worked towards the development and maintenance of the Results section of the institute website.

#### **PROJECTS**

#### Iterative Maximum Margin Matrix Factorization in Movie Recommender Systems

Sep 2021 - Present

National Institute of Technology, Warangal

- Spearheading my research team of three on recommender systems.
- Investigated the iterative maximum margin matrix factorization (HMMMF) model for collaborative filtering.
- Proposed an efficient and novel framework for constructing a hierarchical multi-class SVM model of binary matrix factorization to handle the matrix completion of the ordinal rating matrix using the MovieLens dataset.
- Working towards comparing our method with nine state-of-the-art algorithms based on two movie recommendation benchmark datasets using Root Mean Square Error (RMSE) and Mean Absolute Error (MAE) measure.

#### **Traffic Sign Classification**

March 2021 - May 2021

National Institute of Technology, Warangal

Built a CNN model to identify traffic signs with 95% accuracy using TensorFlow, Keras on a German Traffic Sign Recognition
Benchmark (GTSRB) dataset, overcoming the main challenges of poor resolution and contrast of images and class label skew of the
dataset.

#### Volunteering

# Computer Science and Engineering Association, NIT Warangal

August 2021 - Present

Joint Secretary

- Led the Quiz and organized 20+ events within four months.
- Piloted the Event Conduction and Coordination (ECC) Team.

#### **IEEE Student Branch, NITW**

August 2021 - Present

Web Development Lead

- Developed IEEE Student Branch, NIT Warangal chapter website for scheduling and promoting events and activities held.
- Mentored and mobilized the web development team by regular design meetings.

#### **ACHIEVEMENTS**

- Awarded first runner-up position among 41 teams in Devathon an annual coding competition conducted in NITW, 2019.
- Secured perfect scores (800/800) in each SAT subject test Math Level II, Physics, Chemistry, 2017.
- Gold Medalist, Received Academic Excellence Award for scoring 94.8% in the All India Senior School Certificate Examination (AISSCE), International Indian School Al Jubail, 2018.
- Gold Medalist, Received Academic Excellence Award for scoring 10/10 GPA in the All India Secondary School Examination (AISSE), International Indian School Al Jubail, 2016.

# **SKILLS**

**Programming Languages:** Python, Java, C, C++, SQL, Matlab, Perl, Git **Web Development**: HTML, CSS, JavaScript, Bootstrap, Django, ReactJS **Libraries**: PyTorch, TensorFlow, Keras, Numpy, Pandas, Scikit-learn, Matplotlib

Languages: English (Proficient), Hindi (Native), Urdu (Native), Telugu (Fluent), Arabic (Intermediate)