# Shri Harri Priya Ramesh

Phoenix, AZ, USA

## Education

Arizona State University

Aug 2023 - May 2025

Master of Science in Information Technology; GPA: 4.0/4.0

Mesa, AZ

Sri Sai Ram Institute of Technology affiliated with Anna University

Jul 2019 - May 2023

Bachelor of Engineering in Computer Science and Engineering; CGPA: 8.91/10.0

Chennai, India

#### Technical Skills

Languages and Databases: Python, C, C++, Javascript, Typescript, SQL, PL/SQL, MySQL, Oracle, MongoDB, Java

Web Development and Frameworks: ReactJS, Django, Flask, NextJS, HTML, CSS, Tailwind CSS

Python Libraries: PyTorch, Karas, Scikit-Learn, Pandas, NumPy, SciPy, YOLO, Tensorflow, TenSEAL, Bokeh

Tools and Technologies: Google Cloud, Git, Linux, Figma, Adobe XD, Wireshark, Docker, AWS, Tableau, Apache Spark

# Experience

# Research and Development Intern

Sep 2021 - Feb 2022

Finari Services Private Limited

Chennai, India

- Formulated more than 20 reusable custom PL/SQL packages, stored procedures, and functions in Oracle
- Employed optimized queries in PL/SQL, resulting in a 45% reduction in query execution time
- Constructed more than 50 custom tables, programmatically populated through stored procedures
- Modeled comprehensive test cases with 100% coverage for database components, accompanied by detailed documentation

#### Research Intern

Nov 2021 - Jan 2022

National Institute of Ocean Technology

Chennai, India

- Explored strategies to effectively reconstruct missing values in a dataset of over 10,000 meteorological sensor records
- Evaluated 9 optimal data imputation strategies through exploratory data analysis to determine the best approach
- Achieved 98.59% accuracy in rebuilding dataset, subsequently conducted comprehensive correlational analysis to create statistical models

## **Projects**

#### Oil Spill Detection | PyTorch , CNN , GAN

Nov 2022 - Apr 2023

- Built an oil spill detection model, that can accurately classify with only 100 images, utilizing subpixel optimization and Multiscale Conditional Adversarial Network (MCAN)
- Devised adaptive threshold clustering on superpixels to enhance accuracy by identifying and reducing misclassifications, resulting in a 40% decrease in outlier detection errors
- Integrated a CNN segmentation model to accurately identify oil spill regions with an accuracy of 96.53%

#### **Visibility Prediction System** | AWS - Sagemaker, QuickSight, Python

Mar 2022 - Sep 2022

- Developed an end-to-end cloud-based ML workflow on AWS to forecast hourly visibility in airports with a 20% boost in accuracy compared to existing models
- Streamlined the creation of time series dataset containing over 12,000 records and 14 parameters by converting netCDF files into CSV format via Python scripts
- Attained 92% accuracy in predicting visibility using DeepAR (Auto Regressive model) after evaluating and comparing various models including LSTM, ARIMA, and others
- Designed an interactive dashboard in AWS QuickSight, featuring over 15 charts to showcase predictive analytics

#### Achievements

# Best Innovative Project Award | PyTorch, CNN, GAN

Nov 2022 - Apr 2023

• Earned best innovative project award from Computer Society of India for undergraduate capstone project, triumphing over 1.25,000 members

Smart India Hackathon (SIH) Winner | AWS - Sagemaker, QuickSight, Python

Mar 2022 - Sep 2022

• Secured 1st place in prestigious national level "Smart India Hackathon" by developing an hourly visibility forecast model

## Content Lead in Google Student Developers Club | Webinar

 $Feb\ 2021-Feb\ 2022$ 

• Directed content creation, and coordination for Google Developer Student Club, delivering engaging presentations to 500+ college students, fostering technical development