

SHARAN SUNDAR

ML ENGINEER/RESEARCH ASSISTANT









EXPERIENCE

Undergrad Research Assistant

Solarillion Foundation | 6/2017-Present

- Developed and deployed a Machine Learning model in real-time for predicting the occupancy of a movie using its booking history in collaboration with one of the top three multiplex chains in India.
- Developed a Generic Deep Framework for Cross-Domain Univariate and Multivariate Time Series Forecast including S&P500 stocks.

PUBLICATIONS

Convolutional Long Short-Term Memory Neural Networks for Hierarchical Species Prediction

Conference and Labs of the Evaluation Forum (CLEF2018) • Avignon, France — Sep,2018

DeepTrace: A Generic Framework for Time Series Forecasting

15th International Work-Conference on Artificial Neural Networks(IWANN 2019) • Gran Canaria, Spain — June, 2019

A Machine-Learning approach to Occupancy **Forecasting using Feature Tuning (Under** Review)

19th IEEE International Conference on Data Mining (ICDM 2019) • Beijing, China — November, 2019

Surprisingly Simple Short Answer Grading (Under Review)

34th Association for the Advancement of Artificial Intelligence Conference(AAAI 2019) • New York, USA — June, 2019

EDUCATION

B.E-Computer Science Engineering

Anna University(SSN) | 05/2015-Present | 7.9

CBSE-Higher Secondary Education

Chettinad Vidyashram | 06/2000-04/2015 | 94.8%

SKILLS

Advanced: Python, Deep Learning Intermediate: C, C++, Java, Linux **Beginner:** HTML/CSS, Android Studio

Tools & Frameworks:

Arduino, Git, Tensorflow, Scikit-learn, Kibana

EVENTS

Ideathon-2016(Paytm), Delhi: Top 100 in India

Smart India Hackathon 2017, Rajkot: Finalists

Smart India Hackathon 2018(ISRO), Gujarat: Finalists

Microsoft AI Challenge - 2018, India: Top 50 in India

NOTABLE PROJECTS

Road not taken

Pytorch, Kivy, Pyshp

An application that reads road networks as shapefiles and generates the minimum spanning tree using conventional and agent-based (Reinforcement Learning) algorithms.

Datasets: Google Earth, ISRO's Geoportal

Day Ahead Movie Occupancy Prediction

Keras, Pandas

Branched-LSTM Deep models and ExtraTrees models with engineered and tuned features to predict occupancy per screen per show for a popular multiplex in real time.

Datasets: Booking data (Transactional) (2013-2017)

ML for Speed Control of DC Motor

Arduino, 12V DC Motor, IR Sensor

Developed a polynomial regression algorithm to stabilize the error between the user and sense speed under no load and loaded conditions for a 12 V DC motor.

ORGANISATIONS/POSITIONS

Association of Computer Engineers (ACE), SSN

President | 08/2018 - 05/2019

- Responsible for the activities of the Department of Computer Science Engineering.
- Member of the core behind SSN's Technical Fest Invente3.0 (September 21-22,2018).

Teach-A-School

Teacher Volunteer | 10/2016-04/2017

Delivered Basic Math and Science concepts middle school children (6th Grade, Lady Sivaswami Iyer Girls School).

CURRENT WORK

Abstractive Text Summarization | Short Answer Evaluator | CLEF2019