

# 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 (CLEF 2018) Avignon, France — Sep,2018

# DeepTrace: Generic Deep Framework for Cross-**Domain Univariate and Multivariate Time Series Forecast (Under Review)**

Association for the Advancement of Artificial Intelligence (AAAI-19) • Hawaii, USA — Feb,2019

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

SIAM International Conference on Data Mining (SDM19) • Alberta, Canada — May, 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**

# Smart India Hackathon 2018(ISRO), Gujarat

## **Smart City Hackathon 2017, Rajkot**

**Finalists** 

## Ideathon(Paytm) 2016, Delhi

Top 100 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

## **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.

Dataset: 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 - Present

- 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