

# Aashish Kumar Jain

Buffalo, NY, USA | aashish\_jain@live.com | (+1)716-748-1383

## EDUCATION

### UNIVERSITY AT BUFFALO

Aug 2018 - Dec 2019 (Expected)  
Buffalo, NY, USA  
M.S. in Computer Science and Engineering  
CGPA: 3.58/4.0

### VELAMMAL ENGINEERING COLLEGE

(Affiliated to Anna University)  
Aug 2013 - Jun 2017  
Chennai, TN, India  
B.E. in Electrical and Electronics  
CGPA: 7.62/10

## LINKS

Website:// [aashish-jain.github.io](https://aashish-jain.github.io)  
Github:// [aashish-jain](https://github.com/aashish-jain)  
LinkedIn:// [aashish-jain](https://www.linkedin.com/in/aashish-jain)

## COURSEWORK

- Analysis of Algorithms
- Introduction to Machine Learning
- Operating Systems
- Introduction to Parallel and Distributed Computing

## PROGRAMMING

### PROFICIENT IN

Python • C • C++

### FAMILIAR WITH

Java • C# • Bash

### APIS AND FRAMEWORKS

- MPICH • OpenMP
- Tensorflow • Keras
- PySpark • OpenCV
- CUDA • Boost

### SERVICES

- AWS • Heroku

## HARDWARE

- ATMEGA Microcontrollers
- Raspberry Pi
- BeagleBone Black

## EXPERIENCE

### SOLARILLION FOUNDATION | Chennai, India

#### FULL-TIME RESEARCH ASSISTANT | May 2017 – Jul 2018

- Developed a Machine Learning model for movie turnout prediction in collaboration with an Indian multiplex chain and deployed it in real-time.
- Administered Server and NAS dedicated for research in Machine Learning.

#### TEACHING ASSISTANT | Sep 2016 – Jul 2018

- Mentored students working on research projects in the domain of embedded system and Machine Learning.
- Framed questions to orient students for research in ML.

#### UNDERGRADUATE RESEARCH ASSISTANT | Sep 2016 – Apr 2017

- Developed Non-intrusive Load monitoring system algorithms for embedded systems.
- Built a DAQ system with test-bench for acquiring data for building NILM models.

## PUBLICATIONS

- **PEAK BASED DEVICE CLASSIFICATION FOR NILM ON A LOW-COST EMBEDDED PLATFORM USING EXTRA-TREES**

link: <https://ieeexplore.ieee.org/document/8284200>

Presented at MIT Undergraduate Research Technology Conference 2017

Worked on Data pre-processing and Classification Algorithm

Used: Python, Scikit-learn, Tensorflow, Raspberry Pi 3

- **LOW-COST NON-INTRUSIVE DEVICE IDENTIFICATION SYSTEM**

link: <http://ieeexplore.ieee.org/document/7791140/>

Presented at IEEE Dallas Circuits and Systems Conference 2016

Worked on feature engineering and run-time testing

Used: Arduino, Python

## PROJECTS

- **DAY-AHEAD MOVIE OCCUPANCY FORECASTING**

Worked on data pre-processing and engineered features from the booking transactions of a movie for day-ahead forecast of a movie's occupancy using deep learning.

Used: Tensorflow, Keras, Scikit learn, AWS S3, SQL server

- **PERFORMANCE UPDATER**

Built a slack-bot that displays students' attendance and progress when summoned.

Used : Slacker, Python, Pandas, Google API, Heroku

- **SERVER WITH NETWORK ATTACHED STORAGE (NAS)**

Assembled and configured a Server with NAS dedicated for Research Purposes at SF.

Used : Memtest, Stress

- **HIGH-SPEED DAQ FOR NILM**

Built a high-speed Data acquisition and test-bench for NILM.

Used: Beaglebone Black Programmable Real-time Unit (PRU)

## ACHIEVEMENTS

- **BEST RESEARCH PERFORMER** 2016 - Solarillion Foundation.
- **E-YANTRA** 2016 - Semi-finalist of national level robotics competition organized by IIT Bombay.
- **BEST ORIENTATION PERFORMER** 2015 - Solarillion Foundation.