Aashish Kumar Jain

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EDUCATION

ANNA UNIVERSITY
Aug 2017 | Chennai, TN, India
B.E. in Electrical and Electronics
CGPA: 7.62/10

LINKS

Website:// **aashish-jain.github.io**
Github:// **aashish-jain**
LinkedIn:// **aashish-jain**

COURSEWORK

- Fundamentals of Computer Programming
- Object Oriented Programming
- Microprocessors and Microcontrollers
- Digital and Logic Circuits
- Embedded Systems

SKILLS

PROGRAMMING

Over 5k lines:
Python • C++ • C
Over 1k lines:
LaTeX • Shell • Assembly
Familiar with:
Bash • Go • HTML • C# • MySQL

HARDWARE

ATMEGA Microcontrollers • BeagleBone Black • Raspberry Pi

FRAMEWORKS & API(S)

Tensorflow, Scikit-learn, Keras, OpenCV, Slacker, Google API

OS

Linux • Windows • MacOS

SERVICES

Amazon Web Services(AWS) • Heroku

AREA OF INTERESTS

- Machine Learning
- Parallel Computing
- Distributed Systems
- Internet of Things

EXPERIENCE

SOLARILLION FOUNDATION | Chennai, India

Full-time Research Assistant | May 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.
- Administered Server and NAS dedicated for research in Machine Learning.

Undergraduate Research Assistant | Sep 2015 – Apr 2017

- Worked on developing low-cost solutions for Non-Intrusive Load Monitoring (NILM) on embedded platforms using machine learning.

Teaching Assistant | Sep 2016 – Present

- Guided over 15 students in their orientation and research project, conducted orientation for more than four student batches and framed new questions for the orientation students.

PUBLICATIONS

- Peak based Device Classification for NILM on a low-cost Embedded Platform using Extra-Trees
  Presented at MIT Undergraduate Research Technology Conference 2017
  A low computation requirement method for event classification in NILM systems capable of running on a single chip computer (Pi 3).
  Used: Python, Scikit-learn, Raspberry Pi 3
- Low-cost non-intrusive device identification system
  Presented at IEEE Dallas Circuits and Systems Conference 2016
  A low cost standalone system for performing device identification and monitoring power consumption in a rural household in India.
  Used: Arduino, Python

PROJECTS

- Performance Updater: A slack-bot that displays students' attendance and progress when summoned by commands.
  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.
- High-speed DAQ for NILM: Built a high-speed Data aquisition system for building custom NILM dataset.
  Used: Beaglebone Black Programmable Real-time Unit (PRU)
- Closed loop speed control of a DC motor: A P-controller based algorithm that maintains the speed of the motor at the user given speed.

ACHIEVEMENTS

- E-yantra 2016: Led the team of three to semi-finals of national level robotics competition organized by IIT Bombay.
- Best Research Performer: Awarded the research performer for the year 2016 for my contribution to research at Solarillion Foundation.
- Best orientation Performer: Awarded the best orientation performer for the year 2015 for my performance at Solarillion Foundation.