**Sudarshan H V**

**Bachelor of Technology in Electrical Engineering**

**Indian Institute of Technology Tirupati, India**

https://linkedin.com/in/sudarshanhv

## Education Details

| Program | Institute | Year | %/CGPA |
|---|---|---|---|
| Electrical Engineering (BTech) | IIT Tirupati | 2020 | 9.0/10 |
| 2nd PUC, Karnataka State Board | VVS Sardar Patel PU College | 2018 | 92.66% |
| Matriculation (10th Grade) | Auden Public School (ICSE) | 2016 | 96.83% |

## Areas of Interest

- Web Development, Machine Learning, Python and Automation, Software Development, Signal Processing

## Technical Proficiency

| | | |
|---|---|---|
| **Programming Languages** | : | C,C++,Python,JavaScript,Java |
| **Softwares/Tools:** | : | MATLAB, Octave, Tensorflow+Keras, PyTorch+opencv, Visual Studio Code, Git (VCS), Verilog, TinaTl |
| **Front End:** | : | HTML5, CSS, Bootstrap, ReactJS |
| **Back End:** | : | NodeJS, PHP, Express.js |
| **Database:** | : | MySQL, MongoDB |

## Experience

- **Intern at NTT Dimension Data Pvt Ltd (Bengaluru)**
  (**Guide :** Rahul)                                    **[May 2019 - June 2019]**
  - Learnt basics of automation using Python and Stackstorm framework. Completed a mini project on the same.

- **Mobile Science Laboratory Project: Purdue University (US) collaboration**
  (**Guide :** Dr. Madan Mohan Avulapati, Dr. Girish Kumar Rajan)          **[September 2019 - present]**
  - Designing and testing Mobile Science Laboratory Kit around schools in Tirupati, to enhance hands on learning in rural and underprivileged communities

## Projects

- **Full-Stack Website Development**                                            []
  - **Abstract**: Built a CRUD based, RESTful architecture website using Mongo+Express+NodeJS.

- **SENSEX stock market forecasting using Time Series**                         []
  - **Abstract**: Used MATLAB to create a time series model on ARIMA (Auto Regressive Integrated Moving Average) to predict stock market data

- **AES-128 Bit Encryption using Verilog**                                      []
  - **Abstract**: Completed both sequential and combinational models to create AES-128 bit Encryption software using Verilog.

- **Novel Board Game for Environmental Literacy**                               []
  - **Abstract**: Developed a board game prototype, to create awareness on Carbon Footprint and Environmental Literacy.

## Relevant Courses

- Machine Learning by Andrew Ng (Coursera)
- Data Structures and Algorithms (SMA 5503, MIT OCW)
- Discrete Mathematics (6.042J, MIT OCW)
- Modern Python Bootcamp by Colt Steele (Udemy)
- Modern Web Developer Bootcamp by Colt Steele
- ReactJS (Coursera)*
- Digital Signal Processing (EE2206)
- Signals and System (EE2103)
- Probability and Statistics (MA2023)
- Linear Algebra (MA2021)

**\* To be completed by September 2020**

## Achievements

- Progressed to all India finals in the app ideation contest- Earth Matters at Techfest IITB (2019) IIT Bombay.
- Competed in Inter IIT Cultural Meet as part of Debate club, progressed to Quarterfinal in second year since inception of club
- KVPY Fellow (2017,2018)
- KCET Rank 148
- NTSE State Rank 17

## Positions of Responsibility

**Debate Club Core Committee**  [July 2019 - present]

- Conducted several debating sessions, events in Tirutsava 2020

**Tirutsava Web Development Core Committee**  [July 2019 - January 2020]

- Responsible for database handling and backend work.

**Code Club Core Committee Member**  [June 2019 - present]

- Conducted regular online coding contests and seminars on programming as part of club activities

**SPIC MACAY Event Co-ordinator**  [April 2019 - June 2019]

- Part of the team responsible for hosting cultural programmes as part of SPIC MACAY. Hosted several esteemed artistes including Grammy award winner Pandit Vishwa Mohan Bhatt

## Extra Curricular activities

- Debating, Quizzing

## Hobbies and Interests

- Table Tennis, Football, Rubik's Cube,Reading novels (fiction and non-fiction),

- Personal Website: https://sudarshanhv.github.io