# Sidarth Srinivasan

#### Education

2016–2020 Indian Institute of Information Technology, Design & Manufacturing, Kancheepuram,

Electronics & Communication Engineering, Bachelors of Technology.

CGPA - 8.92; Major GPA: 9.83

2014-2016 Maharishi Vidya Mandir,

Grade XII (CBSE), Aggregate - 96.4 %.

2013–2014 SBOA School & Junior College,

Grade X (CBSE), Aggregate - 98 %.

## Research & Industry Experience

May'19- Research Intern, CPDM, Indian Institute of Science, Bangalore.

Oct'19 • Developed an open domain question-answering system for a Virtual Reality game using Natural Language Processing & Neural Networks.

• Product form design model using Genetic Algorithms (\*upcoming research paper).

May'18- Data Analyst Intern, RISE Labs, Dept. of Computer Science, IIT-Madras.

July'18 • Experimenting various Machine Learning models on Big Data using FinLibre Stack.

• Predicting the demand and supplies of perishable goods using Time Forecasting models.

Aug'18- Data Analyst Intern, SIDDHI Agro Food Industry, Mumbai.

Sep'18 • Performed Data Analysis on the global export market of Rose products.

Employed Time Series forecasting models for analysis and prediction.

Nov'17- **Project Intern**, KNILA Solutions, Coimbatore.

Dec'17 • Home Automation Project using IOT.

• Worked in the R&D team and designed miniature working models as a part of architecture validation.

Oct'19- Teaching Assistant, Pattern Recognition course, IIITD&M Kancheepuram.

Present

### Projects

## Jan'19- Retail Autonomous Bot, IIITD&M, Kancheepuram.

Apr'19 • A MVP to enhance customer shopping experience at huge retail stores.

- Based on the requirements of the customer, the bot dynamically calculates the shortest path and maneuvers accordingly.
- Heroku servers which communicates with the bot were set up. PID controllers, IR and ultrasonic sensors were used for bot movements.
- A mobile application for customers was designed via which the users can input their product requirements.
- A shop floor was constructed during testing to emulate the real-time shopping dynamics.
- Jan'19- **Gesture Controlled Bot**, *IIITD&M*, *Kancheepuram*.
- Mar'19 Project is based on wireless communication where the data from hand gestures is transmitted to the robot over RF link.
  - Accelerometer sensor based gesture controlled bot.
  - o Arduino Nano micro-controller was used.
- Sep'18- **Self Driving Vehicle**, *IIITD&M*, *Kancheepuram*.
- Nov'18 Using web camera along with OpenCV to recognize traffic lights signal.
  - Using a GPIO to control brightness of traffic lights.
  - Using socket to connect server to calculate and return commands to Raspberry Pi car.
- Jan'18- **Library Management System**, *IIITD&M*, *Kancheepuram*.
- Apr'18 A complete RFID based library management system in which every book is installed with a RF receiver which scans automatically when the user checks out with a book.
  - Linked with the server which updates the availability of the books.
  - An application was designed for an interactive interface.

#### Skills

Programming Python, C/C++, C#, MATLAB, R, Embedded C

ML/DL Keras, Tensorflow, Pytorch, Scikit-learn

Image OpenCV, Scikit-Image, Scikit-Video

processing

Database MYSQL, SQL Server, Hadoop

Visualization Tableau, Metabase

Software Arduino IDE, Raspberry Pi

Tools

#### Achievements

#### Academic

- 1. Department topper for the semesters 5 & 6.
- 2. Innovative product idea award for the Retail Autonomous Bot product at the EHIPASSIKO hackathon.
- 3. Academic Proficiency Award for securing more than 95% in grade XII examination conducted by the Central Board of Secondary Education.
- 4. School topper in English in grade XII examination conducted by the Central Board of Secondary Education.

#### Other

- 1. Winner of the Math Quiz (2017), winner of the Cryptomaniac event (2016) at Invente Tech Fest a national level technical fest organized by SSN College of Engineering.
- 2. Winner at Pitch Please, Electrohunt events at the Vashisht Technical Fest conducted by IIITD&M Kancheepuram.
- 3. Runner up in the music event at the intra college fest.

# Position of Responsibility

- 1. An active member of Vidhai, a non-profit initiative catering to the educational and infrastructural needs of underprivileged students.
- 2. Played an organizational role in a Health Relief Camp set up for victims in the flood-affected areas of Tamil Nadu during the 2015 Floods.
- 3. Member of the institute Mentor Mentee committee.
- 4. Coordinator of the institute Placement Cell.
- 5. Department representative for the years 2018 & 2019.
- 6. Co-curricular current affairs coordinator.