# T Sree Harsha | ME15B070 Indian Institute of Technology Madras



#### **EDUCATION AND SCHOLASTIC ACHIEVEMENTS**

Program	Institution	%/CGPA	Year of completion
B.Tech in Mechanical Engineering	Indian Institute of Technology Madras	8.84	2019
XII (SSC)	Sri Chaitanya Educational Institution	98.6%	2015
X (SSC)	Dr. K.K.R.'s Gowthan Concept School	9.5/10	2013

- Among top 1 percent in JEE Mains and JEE Advanced 2015
- Stood 6<sup>th</sup> in Telangana State EAMCET 2015
- Scored 407 out of 450 in BITSAT 2015

## PROFESSIONAL EXPERIENCE

• Product Development at Titan Company Limited, Research Park, IIT Madras

May - Jul'17

- Developed a wearable device to control Powerpoint presentations wirelessly using gestures
- Used Attiny85 microcontroller with gyroscope as sensor and Bluetooth to communicate
- Made a Windows forms application in **C#** to receive the data and control Powerpoint presentations
- Currently in talks to implement the product across Titan offices and stores in India

# **PROJECTS**

• KINECT, Envisage, IIT Madras

Sep - Dec'16

- Designed and created a technical entertainment show with gesture detection using Microsoft Kinect
- Programmed gesture controlled graphics in C++ using frameworks written over OpenGL
- Displayed to an audience of 2000 as a part of Envisage in Shaastra; Annual Technical Fest
- SELF BALANCING ARM, Instrumentation and Control Systems

Mar - Apr'17

- Made a self balancing arm powered by propellers balancing at set angle
- Implemented closed loop feedback control using IMU sensor, Arduino and P.I.D. control system
- Team Member, Electrical Subsystem, Amogh, IIT Madras

Jun'17 - Current

- Amogh is an Autonomous underwater vehicle being developed by IIT Madras Undergraduate students
- Currently working on designing the Electronic speed controllers for thrusters and power board
- Aimed at providing reliable and cost effective solutions for under water inspection

#### **COURSEWORK**

- Applied Machine Learning
- Design of Algorithms
- Computational Fluid Dynamics

- Applied Thermal Engineering
- Design of Machine Elements\*
- Manufacturing Process

- Foundations of Fluid Mechanics
- Energy Conversion System\*
- Probability and Statistics

#### **SKILLS**

- Programming Languages: C, C++, C#, Python
- Software Packages: AutoCAD, MATLAB, Arduino, Fusion 360, Eagle

## POSITIONS OF RESPONSIBILITY

• Envisage Coordinator, Shaastra; Annual Technical Fest

Sep - Dec'16

- Part of a 25 member team which organized Envisage; India's first student run Technical Entertainment show
- Successfully displayed projects worth over 4 Lakhs and managed an audience of 2000 people

• Facilities and Requirements Coordinator, Saarang; Annual Cultural Fest

Sep - Dec'16

- Smoothly handled the requirements of events without much hassle
- Optimized the requirements of various events and reduced expenses by 25 percent of proposed budget

# **CO-CURRICULAR ACTIVITIES**

- Placed 3<sup>rd</sup>(out of 10 teams) in Autonomous Robotics, MEA '16; Mechanical Engineering department fest
- Successfully completed 50km cycling event organized by Cycling Club of IIT Madras