MOHAMED NAVEED G

National Institute of Technology ⬦ Trichy-15, Tamil Nadu, India

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EDUCATION

National Institute of Technology Trichy   2014 - Present
Bachelor of Technology (Instrumentation and Control Engineering), 6th Semester
CGPA=8.85/10

Campion Anglo-Indian Higher Secondary School   2012 - 2014
Class XII *(Physics, Chemistry, Maths, Biology, English, Tamil)*
Percentage:**96.25%**

Campion Anglo-Indian Higher Secondary School   2000 - 2012
Class X *(Science, Maths, Social Studies, English, Tamil)*
Percentage:**98.00%,** Ranked 1st in School

RESEARCH INTERESTS

Robotics, Control Systems, Machine Learning, Embedded Systems, Electronics, Design

CAREER OBJECTIVE

To contribute in the field of robotics in a way that it is useful for the common man and to spread knowledge effectively through dedicated teaching.

ACADEMIC ACHIEVEMENTS AND CO-CURRICULAR ACTIVITIES

· Recipient of **Science Academies' Summer Research Fellowship** 2016.
· Secured **3rd place** for my project **SLAT-HEX** in 'Sangam'- an innovation contest conducted during the international technical festival Pragyan at NIT Trichy.
· Team Member at **Robotics and Machine Intelligence**, official Robotics R&D club of NIT-T.
· Received the **'Campion Old Boys Association Award'** for topping the school in class 10 board exams.

INTERNSHIP AND RESEARCH

DETECTION OF SPAM IN TWITTER USING MACHINE LEARNING   May 16' - July16'
Science Academies' Summer Research Fellowship

Guide: **Prof N.Balakrishnan, Supercomputer Education Research Center, IISc, Bengaluru**
· The aim of the project was to detect Spam in Twitter and to analyse the machine learning algorithms used in Spam detection.
· Literature survey on the existing methods was done.
· Six machine learning algorithms were compared and the effect of Cost sensitive learning was tested.
· The percentage of spam in Twitter was found using the best performing algorithm.
· For full report visit: Link

SELF-SENSING AND ACTUATION USING SHAPE MEMORY ALLOY

On semester Project *Aug 16'- Present*

· Guide: **Dr K.Dhanalakshmi, Associate Professor, ICE, NIT Trichy**
· The project involves the control of vibrations in a cantilever beam using shape memory alloy. The shape memory alloy will be used as a sensor as well as an actuator in the system.
· Different control algorithms will be implemented in the system starting from PID to achieve vibration control.

PROJECTS

SOCCER ROBOTS
Jul 16' - Present

· Aim of the project is to develop a team of small sized omnidirectional robots capable of playing soccer autonomously.
· Four omnidirectional robots were designed and fabricated with the necessary mechanisms for shooting and dribbling.
· Localizing of the four robots was done using computer vision.
· Kinematic model of the robot was used for point to point navigation.
· For report: Link

SLAT-HEX
Nov 15' - Feb 16'

Sound source Localizing All Terrain Hexapod

· Six-legged, all-terrain, disaster relief robot inspired from R-HEX by Boston Dynamics.
· Could triangulate the source of sound such as a person shouting for help and move towards the source giving live video feed as it moves.
· It can also traverse different terrains like slopes, gravel, mud, stairs and can operate even when inverted.
· It can be used in Military surveillance and in Disaster management sectors.
· For working video: Link

TECHNICAL STRENGTHS

Programming Languages	C, Python, Embedded C, Assembly
Platforms	Arduino, ARM LPC 2148, NI Elvis, MCC DAQ
Operating Systems	Linux, Windows
Tools	Matlab, OpenCV, Labview, Weka, TINA, SolidWorks, Latex

EXTRA-CURRICULAR ACTIVITIES

· Conducted a Six-day workshop on basics of Robotics, microcontrollers, electronics and mechanics for freshers.
· Conducted a workshop on my project 'SLAT-HEX' at **SENSORS 16'** (Sensors is the annual national level technical symposium of the department of Instrumentation and Control Engineering).
· Represented my department in Sportsfete for Table-Tennis (Sportsfete is the annual inter-departmental sports tournament in NIT-T)
· Represented school in inter-school Table-tennis tournament (Campofez) and was Runners up twice in 2010 and 2013
· 'Event Manager' for the event Seven Stones (Manual Robotics event) in Pragyan 16' (Technical festival)