# Hemant Yadav

• +91~8285207072 • www.linkedin.com/in/tnameh • raotnameh@gmail.com

#### **EDUCATION**

### Netaji Subhas Institute of Technology, University of Delhi

Aug2014-May2018

Bachelor of Engineering in Manufacturing Processes and Automation

69.59%

•Coursework: Mathematics I, II & III, Manufacturing, Programming, Mechanics, Control Systems, Robotics, Artificial Intelligence, Computer Graphics, Microprocessors & Appl, Analog & Digital electronics.

# S.H. S.N. Sidheshwar Sr. Sec.school, Gurgaon, CBSE

*Apr*2012-*Mar*2013

High School (Class XII)

88.20%

• 95 in Mathematics & 90 in Physics.

#### **EXPERIENCE**

### Research Assistant at MIDAS lab, IIIT Delhi under Dr.Rajiv Ratn Shah.

Dec 2018-Present

Part of a cross-functional team working on Automatic Speech Recognition (ASR) project.

# AI & Mechanical Engineer, at a start-up.

Aug2018-Dec2018

Part of a cross-functional team involved with the development of Assistive Wearable technology for Blinds.

• Working on Image classification and Object detection using tensorflow and OpenCV using python to assist blinds in perceiving the external Environment.

# Teaching Assistant, Coding Ninjas

June 2018 - Jul 2018

part of a cross-functional team and helped the professor in teaching the Machine Learning concepts.

### Summer Internship, Rico Auto Industries ltd., India

June 2016-July 2016

Leading Integrated Supplier of Automotive Components & Assemblies.

• worked on desinging of the horizontal and vertical guideways of a CNC machine using Solidworks.

#### ACADEMIC PROJECTS

# Depth Estimation Using CNN with Transfer Learning from a Single Image

Aug2017-May2018

Developed a pipeline to estimate the depth of a scene from a single image using CNN.

•compared two CNN models one with transfer learning and one without it, the one with transfer learning achieved more accuracy in less no of iterations means faster training time, though had 10 times more parameters compared to the other.

# Probabilistic Filter Algorithm on real time Robot manipulator

Jan 2017 - May 2017

Successfully completed one project on actual hardware, Key learning: Kalman Filter family, PID.

•Study and Estimation of Joint Angles using Extended Kalman Filter in the presence of noise with Phantom Omni Robot.

# Design, Fabrication and Integration of a Formula student Racing Vehicle

Oct2014-June2018

Build two Formula SAE car from scratch, Key learning:Designing, Working of IC Engine particularly Intake & Exhaust, vehicle dynamics, CFD, Ergonomics, Brake system, Team Management, Fabrication, Team Work.

- •Fabrication and assembly of the complete 2016 build of Formula SAE car, Ranked 10th out of 180 Teams in SUPRA SAE INDIA 2016 competition.
- •worked particularly in RESOLVING THE PROBLEM OF CHOKING IN OUR INTAKE using CFD, led to an increased efficiency of intake and exhaust system resulting into less fuel consumption.

# Electro-Mechanical Rotary Part Feeder with Performance Analysis

Auq2016-Dec2016

Design, Developed, Optimized and did Performance analyses of hollow part electromechanical industrial rotary feeding mechanism. Analyzed the output variation vis-a-vis operating parameters; results published in IJIRSET CMS Vol. 6 issue 2 2017 (Impact Factor 6.209).

#### **LEADERSHIP**

**Technical Head**: Bullet Hawk Racing, Formula SAE, University of Delhi.

Nov2016-June2018

#### **SKILLS**

Programming Languages: C, C++, PYTHON.

Applications/Tools: MATLAB, OpenCV, Keras, Tensorflow, Numpy, Pandas, Matplotlib, Scikit-learn, ROS, Git, Linux, Solidworks, Autocad, LaTeX.

## EXTRA - CURRICULAR ACTIVITIES

Basketball, Table Tennis, Football, Volleyball, Cricket. Reading Manga & Hindu Mythology