

SIDHARTH TALIA

userID: sidharhtalia@ymail.com

(+91) 9313-153-603
sidharhtalia@ymail.com
LinkedIn [↗](#)

EDUCATION

Guru Gobind Singh Indraprastha University Delhi — <i>Bharati Vidyapeeth College of Engineering Delhi</i> Bachelor of Technology in Electrical and Electronics Engineering	2016 - 2020 <i>Delhi, IND</i> Cumulative GPA: 8.81/10.0
Sardar Patel Vidyalyaya, Delhi, India — <i>CBSE</i> Class 12th, Computer Science	2014 - 2016 <i>Delhi, IND</i> Percentage: 93.4%

EXPERIENCE

Indian Institute of Technology(I.I.T.)-Delhi <i>DLive project Assistant, Advisor: Dr.Sunil Jha</i> ↗	Jan 2022 - Present <i>Delhi, IND</i>
<ul style="list-style-type: none">Working on Odometry aided lane position estimation and navigation in adverse Indian environments	
Consultant/Freelance software engineer <i>self-employed</i>	October 2020 - December 2021 <i>Delhi, IND</i>
<ul style="list-style-type: none">Providing consultancy/software engineering services to start-ups in the automation sector	
Indian Institute of Technology(I.I.T.)-Delhi <i>DLive project intern, Advisor: Dr.Sunil Jha</i> ↗	June 2019 - July 2020 <i>Delhi, IND</i>
<ul style="list-style-type: none">Worked on the odometry system used by the car for navigationDeveloped and tested Classical CV based lane-detection and keeping system for curved roads in simulation	
Botlab Dynamics (incubated in I.I.T. Delhi) <i>RnD intern</i>	February 2019 - April 2019 <i>Delhi, IND</i>
<ul style="list-style-type: none">Developed Gunnar-Farneback optical flow based visual odometry system	
Indian Institute of Technology(I.I.T.)-Delhi <i>Celestini program India 2018 project intern, Advisor: Dr.Aakanksha Chowdhery</i> ↗	June 2018 - August 2018 <i>Delhi, IND</i>
<ul style="list-style-type: none">Created an Advanced Driver Assistance System (ADAS) coupled with V2V communication ↗Developed a Gunnar-Farneback optical flow based collision prediction system. Tested in simulation and with real world data	
Omnipresent RobotTech <i>Intern</i>	June 2016 - October 2017 <i>Delhi, IND</i>
<ul style="list-style-type: none">Created basic projects to learn about control systems, state estimation, hardware design, and basics of computer visionTaught basics of autonomy to high-school students using the speedobotix kit	

PUBLICATIONS

Sidharth Talia	February 2020
“A multimodal approach for localization of Ackermann steering micro ground vehicles in bad GPS reception environments” (Published in IEEE explore) ↗	
Komal Bagai, S. Talia , S. Banerjee, N.K. Agarwal, H. Sharma	May 2020
“Operation of isolated DFIG with Modified PnO MPPT Algorithm” (Published in JoSDC) ↗	
Abhijeet Bhattacharya, S. Banerjee, S. Girotra, H. Shukla, G. Bhardwaj, S. Talia	June 2020
“Simulation and Design of PI-Controller for the Control of Buck Converter” (Published in JoMSD) ↗	

PROJECTS

Contributions to the MuSHR project:

2020 - 2021

- Multi-agent navigation system [↗](#)
- Integration of the MuSHR car into the Donkey Simulator for reinforcement learning (Unity) [↗](#)
- Leveraging Bezier curves for deep learning based autonomous navigation (Pytorch) [↗](#)

Independent Projects:

2017-2021

- Unified state control using quasi optimal trajectories [↗](#) . (Python, numpy)
- low-cost inertial navigation system [↗](#) . (Embedded C++)
- Low cost mini-self-driving car with robust state estimation and control. Blog 2 [↗](#) (Embedded C++)
- Multi-rotor controller for orientation and altitude control [↗](#) (Embedded C++).
- Internal combustion engine based model car for college competition purposes.
- Deep learning based audio remix generator [↗](#) (Python, Tensorflow)

Projects done with/for GGSIPU:

2017- 2020

- Sinusoidal PWM generation from low cost microcontroller (Embedded C++)
- Solid state control simulation and design for AC Machines (Embedded C++, MATLAB)
- Deep learning based object detection (Python, Tensorflow).

AWARDS AND RECOGNITIONS

2nd position	ML-Hacksprint, BVCoE Delhi - Deep learning for music remixing	2019
3rd position	Celestini Program India 2018 - ADAS coupled with V2V	2018
2nd position	BITS-Hyderabad ATMOS GP - Model I.C. Engine car race	2017
1st position	IIT-Kanpur Techkriti GP -Model I.C. Engine car race	2017
3rd position	HBNIC (innovation challenge) 2017 - Micro autonomous ground vehicle	2017

SOCIETY MEMBERSHIPS

IEEE Student Branch

2018 - 2020

Head of MAKERS student interest group

Delhi, IND

- Conducted workshops for IEEE undergrad students on robotics, CAD.
- Conducted a quad-copter building-and-tuning workshop for undergrad students.

IET Student branch

2016-2020

Student member

Delhi, IND

- Conducted workshops on embedded systems for first year engineering undergraduate students.

TEST SCORES

- GRE general test score: 326, Quant:170, Verbal: 156, AWA: 4.0 Ref. No. : 5976511
- TOEFL-iBT score: 115, Reading:29, Listening:27, Speaking:29, Writing:30, Ref. No.: 2747 8092 1483 4883