

# Samarth Jain

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Cell: 9632211317

## Education

- **R V College of Engineering** Karnataka, India  
*B.E in Telecommunication Engineering; CGPA: 8.2* 2014 – 2018
  - Key Courses: DSP System design, Antenna Design, HDL implementation on FPGA, Networking, Microprocessors And Microcontroller, Embedded Systems and Power Electronics integration, DSP Design

## Experience

- **Hyperloop India** Jan. 2016 – 2017
  - Design and development of a scalable and feasible Hyperloop pod
  - Development of braking control system using MATLAB and Simulink
- **Miracle Electronics** Jan. 2016 – 2017
  - Manufacturing of Halbach motor which has more efficiency than conventional motors at present
  - Development of controller to operate halbach motor
- **Project Garuda** Jan. 2015 – 2016
  - Electrical Subsystem*
  - Designed and fabricated BLDC motor controller with a unique design
  - Troubleshoot and debug power circuit and networking issues in electric vehicle
  - Design and manufacturing of Carbon Fibre Car Shell

## Skills

**Languages:** C/C++, VERILOG, HTML, JAVA, PHP

**Manufacturing Skills:** Multilayer PCB, Carbon Fibre Structures

**Tools:** NI Labview, Solid Works CAD Design and Simulation, Xilinx ISE, Proteus Simulation And Ares PCB Design, MatLab, Ansys HFSS(Maxwell equation Solver)

## Academic Projects

- **3 Phase Motor Controller For Commercial Electric Vehicle** Jan. 2015 - Sep. 2016  
*Academic Project*
  - Developed a Brushless DC Motor controller for electric vehicles
  - Implemented a novel design for above using Power MOSFET, logic gates and ATMEGA32 to increase efficiency
  - Achieved simpler, efficient and lower cost design of a 3 Phase Trapezoidal controller
  - Design verified by rigorously testing on an self designed vehicle

## Achievements

- Initiated and designed **STAND ALONE SOLAR POWER PLANT** for Project Garuda
- Member of Project Garuda, the **only Indian team** to manufacture electric urban concept vehical motorcontroller and complete endurance at an international event, **SHELL ECO MARATHON** held at Singapore March 2017
- Secured 1st position in the state of Delhi and 27th Position nationally at the National Math Olympiad 2013

## References

Prof. M N Dinesh  
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