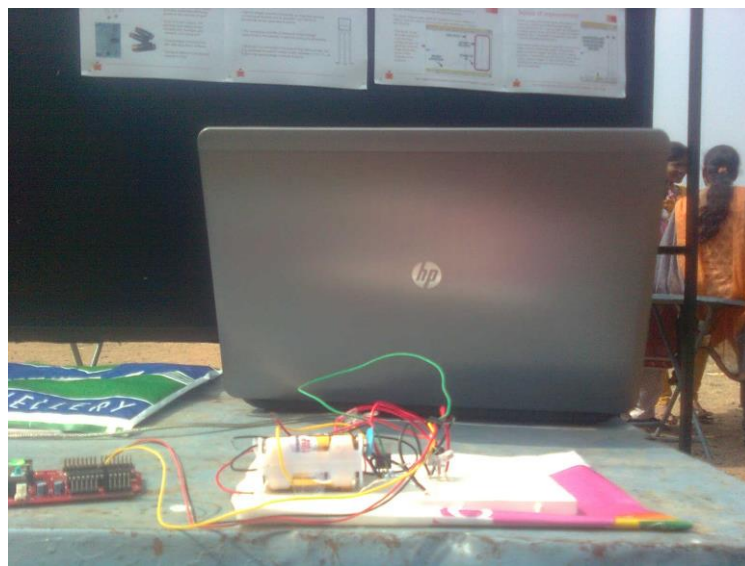1. Fun with camera networks – (Aug-Sep, 2013)
   a. First mini-project at IITH. Voluntary participation. Teamed up with sophomore students to increase interaction. Worked with IITH Multimedia lab.
   b. Demonstrated stereoscopy (3D imaging) using triangulation technique.
   c. Resources – Presentation, http://www.holocube.eu/, http://www.instructables.com/id/10-Minute-Mini-3D-Projection/, http://musion.com/

2. Independent Project – Vibrational Frequency Detector using Light (Oct.-Jan. 2013)
   a. A device for measuring vibrational frequency of mechanical systems using light.
   b. Uses light-to-voltage converter, ADC along with DATAQ kit & software.
   c. Could be used for detecting faults, fractures or damages before it becomes fatal.
   d. Proposed to be implemented in BAJA car subjected to enhanced compactness.

3. Won '**Queen of Sheeba**' – an informal ice-breaker event where you have complete tasks within a stipulated time. The winner is decided by the no. of tasks completed by the team and the authenticity of it. My team emerged as winner among 19 teams.

4. Part of E-Cell (Attended NEN Workshops at IITH & MJCET) and IITH Dance Club
5. Started writing blog **Divine_Lifez** and **Quora**
6. Learnt Linux. Took part in **Google Code Jam** and **Internet Problem Solving Contest**
7. Summer Project – Chrome extension for refined YouTube Recommendation (Dec. 2013)
8. Satellite Project commenced.
9. IITH Alumni Association Logo

10. **KDM Project** – Mechanically Automated Periodic Garden Watering system: A mechanism to water the plants after certain intervals. Helpful in case the owner is out of station. Led a team of 4. Used 3D printed worm gears for speed reduction of the actuator.

11. **MOS Project** – Analytical and FEM analysis of cantilever beam under time-varying forces: Studied the deflection and stress distribution in cantilever beam made of structural steel under dynamic forces.

12. **IITH Library Update** – Working with Drupal: Took this project out of sheer interest to work with CMS. Task – add features, improvise UX

13. 11estates, Unigem Technology Pvt. Ltd. – Developed the front end for two of their upcoming products – HackNinjas and DoctorsNow.

14. **TEDxIITH** – Web & Content Manager v1.0.

15. Thermodynamics Term Papers –
    a. [Molten salt as thermal energy storage system](#)
    b. Everyday life aspects of second law of thermodynamics: A case study
    c. Brayton cycle and variations

16. **IBM IoT Hackathon** – ELAN 2K15: Built a real-time bus tracking system using Arduino based transceiver and IBM Bluemix cloud platform for deployment. Made a web interface for displaying parsed information from obtained data.
    Certificate on drive. Take the screenshots for posting. Ubuntu.

17. **Business Simulation Game Winner** – Participated in IITB E-Summit. Mergers & Acquisition

18. Creative Product Design assignments
19. JSP Pages – DBMS project

20. **Product Development Intern**, Summer 2015 – 3D printing using UV-DLP Technique (details in current resume)

21. Started SummerHookah – Light humour to chill you out.

22. **Nvision2015 Web Coordinator** – Beta website, Main website, Ncode, El Matrico, 45k+ hits and 230% increase in reach.

23. **Design of Machine Elements** – GoKart Project: Led team of 8. Responsible for complete design & cost analysis of steering system for proposed Go-kart.

24. **Heat & Mass Transfer** – Probing the Survival of aquatic ectotherms in extreme seasons: Analytical and CFD analysis of ice formation in lakes during winter and thermal stratification during summer. Modeled lake in ICEM-CFD and studied effect of meshing parameters on final solution obtained using ANSYS-FLUENT.

25. ID1054 Digital Fabrication TA Work

26. Vocals – Transition_Redefined.

27. Elektronika Posters

28. Rubik's Cube Solver – Incomplete. Winter Project.

29. **IBM Drone Hackathon**: Nvision2016 – Top 5 teams selected for demo. Thready – threat detection using drones. Gives the poisonous gas concentration. Used Particle photon. Github - https://github.com/MechanicalCoder/IBM-Drone-Hackathon

30. **i.school workshop** – One of 15 students selected across all programs. Experience design in India.

31. **IC Engines Reports**

32. **Cinepad 1.0**- Smartphone cinematography pod: Developed a prototype of an anti-shaking, multi-DOF cinematography pod for smartphone. Portable & ergonomic, it has gooseneck mobile holder for flexibility and mike-stand components for desired translational & rotational motion.

33. **EML IITH** – Graphic Designer & Core member of organizing committee. Designed the logo.

34. **Gymkhana Election Redundancy checker** - https://github.com/MechanicalCoder/Election-Redundancy-Checker

35. **Internshala merit certificate** – secured 'Robotic Arm' internship out of 700+ applicants

36. **Center for Healthcare Entrepreneurship** – One of the 4 students selected for this internship out of 90+ applicants across all programs. Underwent training at IndioLabs, Bangalore. Responsible for setting up entire lab from scratch – floor plan, equipment purchases, etc. Currently technical assistant to the fellows. Also took 'Design Innovation Thinking' Classes.

37. **SwappingTheBits** – A newsletter series

38. **Bionic Arm** – Pilot project to understand the process. Incomplete.

39. **Web Coordinator** – Sunshine, Counselling Cell IITH: Updated the contents + designer new events page. http://sunshine.iith.ac.in/

40. Started Techblog – Of The Things I Do (OTTID)

41. **StartUp Weekend 2016**: Medbuzz – A personalized connected healthcare monitoring for geriatrics. https://www.f6s.com/medbuzz

    Watch model - https://sketchfab.com/models/2096c47ab25a457389f29d17861e1055

    Felicitated by Dr. Reddy's Lab. Tag - Blog post (published).

42. **Nightmeals** – Co-Founder and design head. Food ordering app for IITH. Currently in building phase.

43. **Cinepad 2.0** – Ongoing. Handy, self-stabilizing. Honors Project. Using gimbal for stability.

44. **YouTube** – skits, video editing, film-making. Screenplay writer, cinematographer, editor and director of Refaire. Won 'Best director' and 'most thoughtful film' award at IITH film festival.

45. CAD_CAM – Slicing of STL File and display in MATLAB - https://github.com/MechanicalCoder/STL-Slicer

46. Multimedia head (unofficial) – ELAN & NVISION 2017

47. Misc. –
    a. Physical arts – during fests. Organizer Biz Quiz (ELAN 2K14), Robowar (ELAN 2K15)
    b. I-touch robotic arm workshop
    c. Smart-dustbin (Inter IIT Tech Meet) – Cancelled
    d. IITHAA Logo
    e. Face painting competition, Independence Week (3rd Prize), Rangoli competition (by Gesture, Arts Club) – 2nd Prize