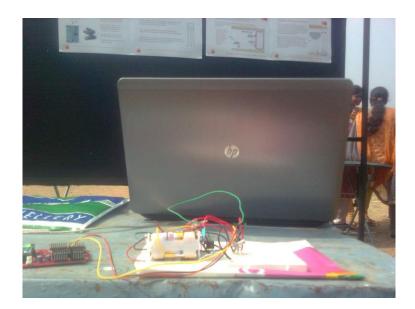
CHANDAN SINHA | THINGS I'VE DONE

- 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. Presentation
 - d. Resources 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.

Find my presentation here - Vibrational Frequency Detector



- 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. Became a part of **NSS** (National Service Scheme)
- 6. Started writing blog **Divine Lifez** and **Quora**
- 7. Learnt Linux. Took part in Google Code Jam and Internet Problem Solving Contest
- 8. Summer Project Chrome extension for refined YouTube Recommendation (Dec. 2013)
- 9. Satellite Project commenced.
- 10. IITH Alumni Association Logo
- 11. **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. View <u>report here</u>.
- 12. **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. View <u>report here</u>.

- 13. **IITH Library Update** Working with Drupal: Took this project out of sheer interest to work with CMS. Task add features, enhance UX
- 14. 11estates, Unigem Technology Pvt. Ltd. Developed the front end for two of their upcoming products HackNinjas and DoctorsNow.
- 15. **TEDxIITH** Web & Content Manager v1.0.
- 16. 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
- 17. **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. <u>Certificate</u>. *Take the screenshots for posting. Ubuntu.*
- 18. Business Simulation Game Winner Participated in IITB E-Summit. Mergers & Acquisition
- 19. Creative Product Design assignments
- 20. JSP Pages DBMS project
- 21. Product Development Intern, Summer 2015 3D printing using UV-DLP Technique. Blog.
- 22. Started SummerHookah Light humour to chill you out.
- 23. **Nvision2015 Web Coordinator** Beta website, Main website, Ncode, El Matrico, 45k+ hits and 230% increase in reach.
- 24. **Design of Machine Elements** GoKart Project: Led team of 8. Responsible for complete design & cost analysis of steering system for proposed Go-kart.
- 25. **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. Modelled lake in ICEM-CFD and studied effect of meshing parameters on final solution obtained using ANSYS-FLUENT.
- 26. ID1054 Digital Fabrication TA Work
- 27. Vocals in my college band 'Transition_Redefined'.
- 28. Elektronika Posters
- 29. Rubik's Cube Solver Incomplete. Winter Project.
- 30. **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
- 31. **i.school workshop** One of 15 students selected across all programs. Experience design in India.

32. IC Engines Reports

- 33. **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.
- 34. EML IITH Graphic Designer & Core member of organizing committee. Designed the logo.
- 35. **Gymkhana Election Redundancy checker** https://github.com/MechanicalCoder/Election-Redundancy-Checker
- 36. Internshala merit certificate secured 'Robotic Arm' internship out of 700+ applicants
- 37. <u>Center for Healthcare Entrepreneurship</u> 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.
- 38. SwappingTheBits A newsletter series
- 39. **Bionic Arm** Pilot project to understand the process. Incomplete.
- 40. **Web Coordinator** Sunshine, Counselling Cell IITH: Updated the contents + designer new events page. http://sunshine.iith.ac.in/
- 41. Started Techblog Of The Things I Do (OTTID)
- 42. **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.
- 43. **Nightmeals** Co-Founder and design head. Food ordering app for IITH. Currently in building phase.
- 44. Cinepad 2.0 Ongoing. Handy, self-stabilizing. Honors Project. Using gimbal for stability.
- 45. <u>YouTube</u> 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.
- 46. CAD_CAM Slicing of STL File and display in MATLAB https://github.com/MechanicalCoder/STL-Slicer
- 47. Multimedia head (unofficial) ELAN & NVISION 2017 Event coverage and aftermovie.
- 48. 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
- 49. Bharat Petroleum Corporation Ltd. (June 2017 Aug 2018)
 - a. Induction at BPCL Headquarters in Mumbai, visit to Mumbai refinery, Wadilube installation. Field training in Delhi: Retail Bijwasan Installation, LPG Loni LPG Plant, Lubes Noida Corporate Office/Sector 15-16
 - b. Posted in retail operations at NJP TOP. Worked in plant maintenance and Terminal Automation System. Later also worked as planning and safety officer.
 - c. Transferred to Balasore. Worked as automation, gantry and wagon operations.
- 50. <u>Triplou</u> (Sep 2018 Present): Co-founded this 360-degree travel experience platform with my friend. Mainly handled product development and graphic design for social media marketing. <u>Pitch deck</u>.
- 51. **Freelance Mechanical Designer** (Sep 2018 Present): Worked on my CAD modelling skills. Find some of my models <u>here</u>.
- 52. **Astronautics** Learning everything I can about space technology, rocket development, astronomy and astrophysics. Check out my <u>YouTube playlist</u> consisting of nit-picked favourite videos of mine an excellent learning resource as well.