# **EDUCATION**

#### **IIT HYDERABAD**

MECHANICAL ENGINEERING (HONS.) Graduated Aug'17 | Telangana, India Cum. GPA: 7.98/10 Product Design & Mechatronics

### **D.A.V PUBLIC SCHOOL**

Intermediate | May'13 IMO, NSO Gold Medalist 96.2% Dhanbad, India

# LINKS

Github:// MechanicalCoder LinkedIn:// chandansinha1 YouTube:// ChandanSinha1 Techblog:// mechandansinha Sketchfab:// chandan\_sinha WordPress:// Chandan Sinha Twitter:// @OrangeDurito

# COURSEWORK

#### **UNDERGRADUATE**

Kinematics & Dynamics of Machinery Design of Machine Elements Machine Drawing & Solid Modeling Computer Integrated Manufacturing Finite Element Analysis Additive Manufacturing (Teaching Assistant)

#### ADDITIONAL/ONLINE

Creative Product Design
Fatigue & Damage Tolerance Introduction
to Data Structures
Database Systems + Lab
Exploring Performance Spectrum
Introduction to Film, Music & Technology
Dynamics & Control - MITOCW

# **SKILLS**

#### **PROGRAMMING**

C • C++ • Python • Arduino HTML5 • CSS3 • JavaScript • ATEX

#### MODELING/SIMULATION

SolidWorks • SolidEdge • ANSYS ICEM-CFD • MATLAB

#### **MISCELLANEOUS**

Databases - PostgreSQL, phpMyAdmin OS - Linux, Windows Creativity - Adobe CC Suite

## WORK FXPERIENCE

# BHARAT PETROLEUM CORP. LTD. | EXECUTIVE, RETAIL OPERATIONS

June 2017 - Aug 2018 | Balasore, India

- Worked on TAS (Terminal Automation System), safety systems, equipment testing & maintenance to facilitate plant operations.
- Managerial responsibilities include product dispatch planning, gantry & wagon operations, audit compliance inline with OISD & MBLR guidelines.

#### **CENTER FOR HEALTHCARE ENTREPRENEURSHIP | INTERN**

May 2016 - Apr 2017 | IIT Hyderabad

- One of 4 interns selected for setting up the lab. Underwent training at IndioLabs, Bangalore to understand the nuances of building med-tech products.
- Learned 'Human Centered Design' approach following the Stanford-India BioDesign process. Spent my final year working as technical assistant to the fellows. Part of early 'NeMo.Care Wellness' team.

#### **DREAMSINFINITY** | PRODUCT DEVELOPMENT INTERN

June - July 2015 | New Delhi, India

- Designed & developed a commercial 3D printer that uses UV-DLP technique.
- Minimized prototyping cost by indigenous manufacturing and in-house resin preparation. Offered in 2 configurations: top-down & bottom-up.
- Wrote the Arduino code base for printing logic in conjunction with customized open-source 3D printing software, Creation Workshop.

# **PROJECTS**

# DYNAMIC MODELING OF 3-AXIS GIMBAL FOR SMARTPHONE STABILIZATION | HONORS PROJECT

Aug 2016 - Apr 2017 | IIT Hyderabad

Inspired by my love for film-making, I worked on a 3-axis gimbal for better hand-held cinematography. As v1.0, built a low-cost prototype of anti-shaking, mutli-DOF cinematography pod. Made lot of my early YouTube videos with this equipment.

#### IIT HYDERABAD STUDENT SATELLITE PROJECT | ADCS MEMBER

Aug 2014 – Apr 2015 | Hyderabad, India

Core member of Attitude Determination & Control Subsystem. Worked on feasibility study of magnetic torquers, reaction wheel and thrusters. Did literature study on payload selection. Head of web team for the same. Reports

#### **AUTOMATED GARDEN WATERING SYSTEM** | PRODUCT DESIGNER

Aug 2014 - Nov 2014 | Hyderabad, India

Built a mechanically-automated device that addresses the problem of periodically watering plants in absence of caretaker. Designed & 3D printed worm gear assembly for actuator speed reduction at end effector. Report

# AWARDS & RECOGNITION

2018 Co-founded Triplou, a 360-degree travel experience platform

2016 Selected for i.school Workshop on 'Experience Design in India' by UoT, Japan

2016 Awarded 'Best Director' for my first short-film 'Refaire' at IITH Film Festival

2016 Start-up Weekend Hyderabad finalist. Developed 'Medbuzz' - a smart wearable for geriatric monitoring. Felicitated by Dr. Reddy's Lab for the same.

2015 Finalist IBM Drone Hackathon for 'Thready'. Blog Post

2015 Business Simulation Game winner. Sponsored entry to Global E-Summit, IITB

2015 Web Coordinator for techfest 'Nvision', TEDxIITH & Counselling Cell