

# SMT. INDIRA GANDHI COLLEGE OF ENGINEERING, GHANSOLI, NAVI MUMBAI-400701





# **Department of Mechanical Engineering**

Organizing

# A one-day workshop on "SolidWorks Simulation & Ansys S/W"

In association with



### Topics to be covered:

- Introduction to SolidWorks
- Advanced Solidworks Modelling
- Parametric Design and Constraints
- Introduction to ANSYS Simulation
- Structural Analysis with ANSYS
- Fluid Dynamics Simulation
- Thermal Analysis in ANSYS

**Time: 1:30 PM** 

Venue: Mechanical Department Date: 12/02/24





35 SOLIDWORKS

PROF. VISHWADEEP SARDAR CONVENOR, HOD MECH

Resource person:
ADITYA PAL
Mechatronics
Engineer
Ansys Expert

PROF. JITENDRA THOMBRE CO-ORDINATOR



#### Vishwadeep Sardar <vishwadeep.sardar@sigce.edu.in>

# Re: Expert Talk On Ansys and Solidworks Simulation

2 messages

Vishwadeep Sardar <vishwadeep.sardar@sigce.edu.in> To: Sachin K <sachin.k@milestone.ac.in>

Mon, Feb 5, 2024 at 12:12 PM

As per our discussion, you will be sharing detailed information regarding seminar which we are planning tomorrow i.e. 06/02/2024 at 1pm.

Waiting for name of speaker and photograph so that we can finalize poster accordingly. Thanking you.

Regards HOD Mech. S.I.G.C.E. Navi Mumbai.

On Thu, Feb 1, 2024, 1:12 PM Sachin K <sachin.k@milestone.ac.in> wrote:

----- Forwarded Message ------Subject: Expert Talk On Ansys.

Date:Mon, 29 Jan 2024 19:36:03 +0530 From: Sachin K <sachin.k@milestone.ac.in> To:vishwadeep.sardar@sigce.edu.in

Date: - 29-01-2024.

To.

The Principal / H.O.D / T.P.O (Mechanical Department)

Smt. Indira Gandhi College Of Engineering.

Ghansoli., Navi mumbai

Respected Sir,

The Milestone Institute Of Technology is one the leading Institute for the different mode of academic streams. It's having 20 years of vast experience in academic scenario of present education system. Milestone Institute of Technology has been associated with various Global Brands like Siemens & Autodesk.

Milestone Institute the name itself has its own introduction in the field of Engineering Design, I.T. & Industrial Automation education within the short span of time it has scaled a remarkable distance and engraved its worth on every milestone of its journey. It has given a direction to mass of the population to make their future bright and successful. On its academic scenario it has join hands with Siemens, Autodesk & Vocational Training Partner for Govt Of India.

We would like to conduct an educative seminar at your college to explore the knowledge of this booming sector. The main objective of this seminar is that the students gain valuable knowledge about their field and help them understand the importance of Real world scenario which can help them in Final Year Project.

On behalf of our institution, we would like to organize seminar in this sector of Engineering Design, We are expecting a positive approach on your end so that we make this event a true success, so as to more and more students can attend the event and get benefited.

Thanking you, do the needful.

Regards,

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Vishwadeep Sardar <vishwadeep.sardar@sigce.edu.in>

To: Sachin K <sachin.k@milestone.ac.in>

Sir.

Due to the short notice period and unavailability of Cad Modeling Lab, we are planning to reschedule this event on monday, 12/02/2024.(Second Half)

Pls convey your feasibility.

Thank you.

Regards

HOD Mech.

S.I.G.C.E.

Navi Mumbai.

[Quoted text hidden]

Mon, Feb 5, 2024 at 5:14 PM



# SMT.INDIRAGANDHICOLLEGEOFENGINEERING, GHANSOLI Affiliated to University of Mumbal, NAAC accredited with grade 'A' DEPARTMENT OF MECHANICAL ENGINEERING

AcademicYear2023-2024 (EVEN Semester)

## NOTICE

Date: 07/02/2024

All the students of SE, TE & BE are hereby informed that Mechanical Engineers Students Association (MESA) is organizing workshop / seminar in association with Milestone PLM Solution pvt. Ltd. on "SIMULATION AND ANSYS S/W".

Also note that this seminar is helpful to carry out Project work, Product Design and Machine Design.

Attendance is mandatory for this event.

EVENT	DATE & TIME	VENUE
SEMINAR ON APPLICATION OF ANSYS S/W AND SIMULATION IN ACADEMICS AND INDUSTRY	12 <sup>Th</sup> February 2024 1.00 PM onwards	MECH, ENGG, DEPT, Classroom 602

Prof. Jitendra Thombre **Event Coordinator** 

Prof. Sardar Vishwadeep S.

HOD

Dr. Sunil Chavan Principal

Vision:

The Mechanical Engineering Department endeavors to be recognized for outstanding education leading to employable engineers to shoulder the responsibilities of transforming thenation.

#### Mission:

- Create competent Mechanical Engineering graduates by providing excellent infrastructureand facilities.
- Develop industry ready multifaceted graduates by promoting Industry-Institute Relations
- To provide the students with an academic environment of excellence, leadership, ethicalguidelines and

# **ADITYA PAL**

Mumbai, India aditya.pal93@gmail.com +91 9680006360 in linkedin.com/in/aditya.310

## MECHATRONICS ENGINEER

As a mechatronics engineer specializing in system design, embedded programming and electro-mechanical integration, I hold experience in projects relating to automobiles and robotics along with hands-on knowledge in rapid-prototyping, manufacturing processes and PCB Design. Well versed in scripting languages, CAD, troubleshooting and testing complex robotic systems. My passion lies in identifying and developing automated solutions for products that have scope for sustainable operation and I'm committed to driving goal-oriented advancements in the field of electrification and automation.

#### **Summary**

- Adept at designing, testing and implementation of electro-mechanical systems.
- Experience in mechanical design, embedded programming, PCB design and electro-mechanical integration
- Proficient in 3D Modelling, Simulation, Finite Element Analysis (FEA) with hands-on experience in rapid prototyping.
- Experience in using ROS as a platform to develop software while integrating motion capture, plus design and implementation of digital controllers.
- Experience in understanding the human-factor of technology and its integration into human lives.
- Strong collaboration, communication skills, and a willingness to assist co-workers.

## Core Competencies

- Robot Operating System (ROS)
- Computer Vision (Object Tracking)
- Solid Edge (3D Modelling, Simulation, FEA)
- Solidworks

- PCB Design and production (Adobe Eagle)
- Embedded Software Development (C++, Python)
- MATLAB (Controller Design & Simulation)
- ANSYS Workbench

- Mechanical modelling
- 3D Printing (Rapid Prototyping)
- OpenSIM (studying human motor parameters)

## Field Experience & Projects

### CAD & CAE Trainer, Milestone PLM Solutions Pvt. Ltd., Thane (May 2023 - Present)

- Training college students and working professionals in Solidworks & ANSYS Workbench.
- Providing guidance, counselling and professional development to students.
- Conducting CAD and CAE seminars for Diploma and Graduate student groups.
- Training personnel in 3D Modelling techniques, Multi-Body Dynamics and Structural and Vibrational Analyses
- Advising Professionals CAD and CAE techniques.

#### Preincubation Program for a startup idea, ARTILAB Foundation, Bengaluru (2021 - Present)

- Develop an affordable Myoelectric-hand for trans-radial amputation, using indigenously sourced raw materials.
- Conducted interviews with Prosthetists and Orthotists in Bengaluru city to understand the requirements of a patient with trans-radial amputation.
- Collected and consolidated data from various sources to understand the market for prosthetics and bionics.
- Supported in creating a roadmap for the product from ideation to POC stage.
- Designed a prototype on CAD (SolidEdge) with fully functional digits, also integrated actuators and the control unit into the design.
- Supported in rapid prototyping of software and hardware, using 3D-Printing techniques and electrical integration.
- Weekly meetings with the core team at ARTILAB to validate the progress and get suggestions for upcoming tasks.
- $Trouble shoot issues \ regarding \ software-hardware \ integration, \ actuators \ and \ assembly.$

#### Mechatronics Advanced Course (JuRP), KTH Royal Institute of Technology, Stockholm (2018)

- Worked on the Juggling Robot Project as a part of Masters Course at KTH.
- Contributed to design and development of prototype for JuRP (Juggling Robot Project).
- Developed a closed-loop control theory that can process real-time data to control a juggling robotic arm.
- Designed a mechanical humanoid arm, to test and validate the control system.
- Integrated Vicon motion capture system with ROS (Robot Operating System) to collect and feed real-time data from the prototypes' environment.
- Organised weekly Scrum meetings to discuss progress and further course of action.
- Worked with a team of researchers to enhance and incorporate new technical requirements into the prototype.

#### SAE Standard Student Formula Car, Republic Motors, Punjab (2015)

- Contributed to the Chassis Design team to build and test the chassis using CAD (SolidWorks & ANSYS).
- Learned to build different mechanical components of an automobile using different machining techniques.
- Supported the core team in assembly of the drive train and also to integrate other components and sub-systems into the vehicle.
- Coordinated with fellow interns and the core team to continuously test and validate components.

### Internship, Hindustan Aeronautics Ltd., Aircraft Manufacturing Division, Nasik (2014)

- Worked at the Design Airframe department and the Fastener Shop to study the design & selection of fasteners used under supersonic conditions (Fighter Aircraft).
- Interviewed technicians and Engineers from the Design Airframe Department, Fastener Shop and Assembly Shop to understand the importance of fasteners from different viewpoints.

## **Academic Credentials**

#### Master of Science, Engineering Design (Mechatronics)

### KTH Royal Institute of Technology, Stockholm 2017-2020

Master Thesis: "A Hybrid Experimental Platform for Advanced Operation Perception and Risk Assessment in Autonomous Vehicles."

#### Bachelor of Technology, Mechanical & Automation Engineering

#### Amity University Rajasthan, Jaipur (India) 2012-2016

Bachelor Thesis: "Handheld Electromagnetic Rail Gun"

#### Languages

