DEEPANATH C | ME14B024

INDIAN INSTITUTE OF TECHNOLOGY MADRAS

240, Alakananda Hostel, IIT Madras.

+91-8675823755



EDUCATION

Program	Institution	%/CGPA	Year of completion
B.Tech in Mechanical Engineering	Indian Institute of Technology Madras, Chennai	8.44^{\dagger}	2018
Minor: System Engineering #			
Class XII, CBSE	Jawahar Senior Secondary School, Neyveli	93.8	2014
Class X, CBSE	Jawahar Higher Secondary School, Neyveli	10^{\dagger}	2012

^{# -} Ongoing; Offered by Chemical Engineering Department, IIT Madras † - CGPA on a scale of 10

SCHOLASTIC ACHIEVEMENTS

- Selected provisionally for KVPY¹ Fellowship Award 2013 ranking among the top 1% from over 1 lakh applicants
- Awardee of INSPIRE Internship Science Camp 2013 by DST, Ministry of Science and Technology, Govt. of India
- Secured State rank of **162** in JEE mains among 10K students
- Received merit certificate from CBSE for scoring 10 points in all subjects in AISSE.

PUBLICATIONS

• Co-authored White Paper: Deepanath C, Dhruti Shah, "Optimized SCADA Application in OpenDNP3 on Energies & Utilities Domain", Tech Mahindra Ltd. (Paper accepted, awaiting publication)

PROFESSIONAL EXPERIENCE

• WINTER INTERNSHIP - CATERPILLAR INC., ITDD, ASCENDAS, CHENNAI

Dec'16 - Jan'17

- Worked on **Light Fabrication Part Proliferation Reduction** project, studied and identified commonality & modularity opportunity in light fabrication components of various cat machines for ITDD²
- Developed an **Autonomous data acquisition System** (DAQ, a vb.NET based GUI) for comparing various machines Light fab components based on its raw material, process, weight, etc. for commonality opportunity
- SUMMER INTERNSHIP TECH MAHINDRA, INNOVATION LAB, PUNE

May'16 - Jul'16

- Developed **SCADA** (Supervisory Control & Data Acquisition) application for transformers deployed in field for TechM's **IEVCS** (Intelligent Electric Vehicle Charging System) project, in collaboration with **Ontario Ministry of Energy**
- Implemented **Distributed Network Protocol** (DNP) in C++ using Open Source OpenDNP3 library for autonomous data acquisition; Scalable & dynamic solution integrated with **SQL Anywhere** for database handling
- Deployed on AWS cloud for testing and got 200% accurate result while uploading to SAP HANA database
- INTERMITTENT INTERNSHIP New England Tech Services, LLC, Connecticut

Feb'16 - Jul'16

- Built **20**% light-weight interactive code tutorials which were to be embedded in the **e-book REVEL for Gaddis C++**, Author: Tony Gaddis, Publisher: **Pearson Higher Edu.**
- Part of 5 memebered team working of creating code tutorials using JSP Applets

PROJECTS

• Online Eccentricity Monitoring of Seamless Tubes

Feb'15 - Present

- Guide: Prof. Arunachalam, Dept. of Mechanical Engineering, IIT Madras.
- Used fiber **optic based IR sensors** for monitoring the pipe quality based on temperature in production environment
- Implemented in Online Eccentricity Monitoring of Seamless Tubes in Cross-Roll Piercing Mill

• WATERFALL GRAPHIC PRINT

Jul'15 - Jan'16

Student led Project, Centre for Innovation (CFI)³, IIT Madras

- Created patterns by controlling the motion of falling water; Displayed in Envisage⁴, the Techno-Cultural show
- Designed whole **Mechanical Structure** and **Fluid Flow system** optimally considering other real life constrains
- Awarded Project member of Most Innovative Project of the Year Award CFI Annual Tech Awards 2015-'16

¹Conducted by IISc Bangalore and Funded by DST, Govt. of India. Web: www.kvpy.iisc.ernet.in/main/index.htm

²Innovation and Technology Development Centre of Caterpillar INC.

³Centre for Innovation (CFI) is the student laboratory of IIT Madras. Web: www.cfi.iitm.ac.in/main/

⁴India's largest student Techno-cultural Show conducted on Day 1 of Shaastra

SKILLS

- Software and Libraries: Visual Studio, Eclipse, Creo, AutoCAD, Android Studio, Adobe Photoshop
- Programming Languages: HTML, CSS, JavaScript, MySQL, SQL Anywhere, C, C++, MTFX
- Operating Systems: Windows, Linux (Ubuntu, Raspbian, Debian)
- Microsoft Office: Advanced Excel, VB Macros

Positions of Responsibility

• Project Super-Coordinator(QMS) - Envisage 5.0, Shaastra 2017

May'16 - Present

- Representing Shaastra⁵ as a part of 10 membered OMS team for ISO 9001:2008 Surveillance Audit
- Managing Envisage team of 25 coordinators, maintaining the quality aspects and documentation of the department
- Leading & Mentoring a team of 4 coordinators for a Techno-Cultural Project for an audience of 6000+ people
- Manager IITM Associations Team, I&AR STUDENT COUNCIL⁶

May'16 - Present

- **Initiated** the **first ever** Affinity Program by associating with **13 major** companies in India to bring in exclusive deals & offers for the IITM fraternity; **300**+ registrations from students in the **Pilot Launch** and reached out to **500**+ **Alumni**
- Leading & Guiding a team of 6 Deputy Managers for closing deals; Associated with 5 major hotels in the city
- COORDINATOR SPONSORSHIP & BRANDING TEAM, I&AR STUDENT COUNCIL

Jun'15-Apr'16

- Formulated Creative Posters & Brochures for all I&AR Activities; Managed Social Media Pages and got 250% reach
- Executed Fund raising and awareness campaigns iitm effect, Batch Project 2016 and raised over 34 Lakhs

RELEVANT COURSES

*- ONGOING COURSES

• Systems Engineering - Specialization in Analytics & Control Systems

Minor Courses

• Process Optimization

Multivariate Data Analysis for Process Modeling*

Optimal Control*

• MANUFACTURING, DESIGN AND DEVELOPMENT

Core Courses

- Strength of Materials
- Design of Machine Elements
- Manufacturing Technology
- THERMAL AND FLUID MECHANICS
- Thermal Power Engineering*
- Foundations of Fluid Mechanics
- Engineering Mechanics
- Process Simulation*
- Machine Tools and Metrology
- Materials and Design
- Instrumentation and Control
- Unconventional Mfg Techniques*

Core Courses

Internal Combustion Engines
 Thermodynamics

Heat Transfer

• MATHEMATICS Elective Courses

• Refrigeration and Air-conditioning*

• Calculus of single & multi variables • Linear Algebra and Numerical Analysis • Differential Equations

EXTRA & CO-CURRICULAR ACTIVITIES

• Managerial Member - Communication & Publicity Team, NSS-IIT Madras

Apr'15-May'16

- Assisted in organizing NSS⁷ activities for over 1000 student volunteers; Handled all Official Social Media Pages
- Represented IIT Madras as a Project Representative with AID-INDIA NGO
- Aided Nethrodaya NGO Activities for a period for 10 days as a Scribe & Executive as part of Winter Internship
- Internshala Student Partner Buddy Internshala

Feb'15 - Present

- Leading and Mentoring 100+ ISPs from south India to promote Internshala⁸ and its services
- Won 1st Prize among 700+ ISPs in Marketing Case Contest Creating awareness about internship among freshers
- ACADEMIC BUDDY, MITR (GUIDANCE & COUNSELLING UNIT), IIT MADRAS

Jan'15-May'16

- Mentored & Tutored 5 freshers for Maths, Physics, Thermodynamics courses for a period of one semester
- Got Selected for maintaining a good academic performance in the required courses
- OTHER INTERESTS
 - Social Service
- Mentoring
- People's Management
- Explored Mechanica⁹, Inter-IIT Sports Meet¹⁰ and Shaastra as coordinator since my first year
- TECHNICAL CONTESTS
 - Won 3rd prize in **Tech Hackathon** conducted by **IRIS Innovation Team, Tech Mahindra** among 25 5-membered employee team for creating *Smart Down-loader* which saves mobile data by as many devices downloading

 $^{^5}$ Shaastra is the annual student technical festival of IIT Madras. Web: www.shaastra.org

⁶International and Alumni Relations Student Council was formed to work under OIR, OAA, IITMAA office of IIT Madras.

⁷NSS IITM Chapter under Govt. of India. Web: www.nss.iitm.ac.in

⁸Under Marketing Team of Internshala. Web: www.internshala.com

⁹Mechanical Engineering Department festival of IIT Madras

¹⁰Inter-IIT 2015 Meet hosted by IIT Madras