

ROMIL KADIA

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ACADEMIC DETAILS

Year	Qualification	Institute, City	CPI/%
2018	M.Tech - Solid Mechanics and Design	Indian Institute of Technology Kanpur	7.8/10
2015	B.E. - Mechanical Engineering	Gujarat Technological University(LDRP-ITR)	9.02/10
2011	Intermediate/+2 (GSEB)	Amrut school, Ahmedabad	83.33%
2009	Matriculation (GSEB)	Amrut school, Ahmedabad	76.92%

KEY SCHOLASTIC ACHIEVEMENTS

- Ranked **1st** in **Bachelor of Engineering** in Department of Mechanical Engineering at LDRP-ITR
- Awarded with **Institute Gold Medal** by Prof. Arvind R. Patel on behalf of Kadva Patidal Kelavni Mandal in 2015.
- Secured **All India Rank 786** in **GATE, 2016** among 0.21 million mechanical engineering candidates.
- Ranked **27th** in Bachelor of Engineering in Mechanical engineering batch of 2015 at Gujarat Technological University.
- Conferred with **Maneklal M. Patel Memorial Scholarship** for academic year 2014-15 (*given to top 1% student from institute*) for their excellent performance at Kadi Sarva Vishwavidyalaya by President Vallabhbhai M. Patel.

COMPUTER SKILLS

- Programming Language:** Python, C/C++, JAVA, HTML/CSS, Fortran-95, Scheme.
- Software:** Solidworks, ANSYS, ABAQUS, MatLab, LATEX, Tinker, AutoCAD, Creo-Parametric.

COURSES UNDERTAKEN

- Mechanical Engineering:** Strength of Material, Solid Mechanics, Molecular Dynamics Simulations, Finite Element Method (Linear, Non-linear), Vibration of Continuous Systems (1D,2D), Advance Dynamics.
- Computer Science and Engineering:** Machine Learning(CS771A, IITK(Audit)), Data Structure and Algorithm in JAVA(CS61B,UC Berkeley(online)), Structure and Interpretation of Computer Program(CS61B, UC Berkeley(online)), Introduction to Algorithms(6.006, MIT OCW), Computer system Engineering(6.033, MIT OCW), Operating System(CS140, Stanford(online)), Theory of Computation(6.045, MIT OCW).

STUDENT GOVERNANCE

Department Placement Moderator (ME)

Student Placement Office

IIT Kanpur

May'17-Present

- Integral member of **3-tier team** of **120 members** to facilitate placements of **1200+** graduating students.
- Developing and strengthening contact with **400+** core companies and inviting them for upcoming placement session.
- Responsible for guiding and helping the mechanical engineering students in their placement preparation.

Web Administrator

Association of Mechanical Engineers

IIT Kanpur

July'17-Present

- Carried out maintenance, planning of content and improved the online presence of IIT Kanpur's AME website.
- Connected **500+** students of mechanical engineering and officials as well as Professors through an informal mean
- Started a web platform (**AME Digital Library**) to enable collaboration of academic literature among students.

THESIS AND PROJECTS

Study of Dislocation and Disclination Motion of Graphene at zero kelvin

M.Tech Thesis, IIT Kanpur

MD Simulation, Thesis Supervisors Dr. Anurag Gupta and Dr. Shakti Singh Gupta

Dec'16-present

- Study of Dislocation and Disclination and their motion of **Fullerene, Torus, CNT, Graphene sheet (Plain and Hollow)**.
- Analysis of each object was done by **Molecular Simulation (Tinker)** and for that input files were generated using **Python**.
- Visualized defects and their energy variation was noted using **Force Field Explorer (FFE)** using **mm-3 (2000) potential**.
- Developed network model of optimization using continuum approach on **Python, MATLAB** and **JAVA** to match MD results.
- Concluded that **Defects are stable at central portion of structure** and they should match object's topology constraints.

Design and Development of Centrifugal Type Positive Frictional Clutch

B.E. Project, LDRP-ITR

Automotive Engineering, Project Supervisor Prof. D. H. Pandya

May'14-May'15

- Avoided clutch slip phenomena by using the combination of centrifugal type, positive and frictional type disc clutch.
- Generated model of complete system using **Solidworks** in first phase and analysis of each component and Assembly as well as sub-Assembly was done in second phase **ANSYS Static Structure toolbar**.
- Patent has been filed and communication is going on with **Indian Patent Office** for design related issues.

Symbol identification

Course Project, IIT Kanpur

ML, under guidance Dr. Purushottam Kar

Aug'17-Present

- Given math/text symbols in handwritten form and that too as in combination, Machine gives LaTeX code for that symbol.

Design of Scheme interpreter in CS61A

Course Project, UC Berkeley(online)

- Developed an interpreter for a subset of the **Scheme** language using **Python**. The project concludes with an graphics challenge to produce recursive images in only a few lines of code in Scheme language.

EXTRA-CURRICULAR ACTIVITIES

- Secured **3rd** position in **Technical Quizz** among **480+** students at Mad-Labs'12(annual departmental technical festival) at LDRP-ITR and awarded with **Bronze medal** by Prof. Kaushal Bhavsar for the same.
- Ranked **2591th** in **SNACK Down'17** a annual competitive programming challenge by **CodeChef** with **22000+** teams.
- Participated in X-Press and **Presented review paper** at **Xenesis'13(annual inter-collegiate technical festival)**.
- Participated in **Paper Presentation** and presented review paper on reciprocating and centrifugal pumps at Mad-Labs'12
- Attended two day automobile workshop on transmission, braking and engine emission at Xenesis'13.