Mandala Akshith Goud

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ACADEMIC DETAILS				
Degree	Specialization	Institute	Year	CPI/%
B.Tech.	Civil Engineering	IIT Gandhinagar	2021-Present	7.53
Class XII	Physics, Chemistry, Maths	Jawahar Navodaya Vidyalaya	2019-2020	95.8
Class X	-	Fatima Convent High School	2017-2018	9.7

INTERNSHIPS

• Technical and Engineering Analyst, Lake Project, Dholakia Foundation

[May '23 - July '23]

- Exposed to various tools and techniques used in **water resource management**, water conservation, and **sustainable practices**, and understood environmental and social responsibilities associated with conserving water resources.
- Analyzed the design and structure of 5 check dams and conducted watershed assessments, data mining and analysis, design and implementation of 3 effective water conservation strategies, resulting in a comprehensive 50 pages report.
- Monitored agricultural and socio-economic impacts of water conservation projects, identifying a 40-200% increase in farmers' incomes and a reduction in migration trends, demonstrating tangible benefits of water management.

PROJECTS

Comprehensive Structural Analysis and Design of a Y-Shaped RCC Building (M25 Concrete) [Aug (Prof. Dhiman Basu, IIT Gandhinagar) | Project Link

[Aug '24 - Nov '24]

- Analyzed a Y-shaped four storey RCC structure using SAP2000, addressing complex load combinations, seismic and wind effects and designed the beams, columns, slabs, flat slabs, staircase, foundation, shear wall, fire design, water supply, cost estimation ensuring compliance with IS 13920:2016, IS 456:2000 and IS 1893:2016 and other IS codes.
- Conducted geospatial survey using total station for the creation of a Digital Elevation Model(DEM) and developed
 a cut-fill volume profile in QGIS; performed hydrological studies with HEC-RAS to calculate plinth level of site.
- Integrated design elements, detailing and structural components into the overall building plan, ensuring functionality, stability, and compliance with project specifications for foundations and **seismic gap** calculations.

• Industrial Steel shed design using SAP2000 Software

[Jan '24 - Feb '24]

(Prof. Dhiman Basu, IIT Gandhinagar)

- Spearheaded the design and analysis of trusses for a large-scale industrial steel shed, utilizing **SAP2000** software to simulate and optimize structural performance under varying loads, including dead, live, and wind forces.
- Engineered tension and compression members with precise calculations, meticulously designing purlins, base plates, and bolts to exacting standards, ensuring optimal robustness, durability, and efficiency throughout the phase.
- Directed a multi-disciplinary team through project milestones, facilitating hands-on learning in steel structure analysis, connection design, and coordination with manufacturing stakeholders, achieving project objectives seamlessly.

POSITIONS OF RESPONSIBILITY

• Events Executive, Amalthea(Annual Technical Summit), IIT Gandhinagar

[Dec '21 - April '23]

- Organised various technical events like Brainwiz, Electronica and theme release events to foster and showcase skills.
- Increased the participation over 1000+ over the past by outreaching through various marketing strategies.

• Senior Events Executive, Tinkerers' Lab, IIT Gandhinagar

[Aug'23 - Present]

- Led a Laser Fair Workshop with hands-on sessions in laser cutting, 3D printing to enhance technical skill-building.
- o Organized various events like **build-a-thon** with a motto to make hands dirty through working on various ideas.

• Member, Abhinaya Club/IIT Gandhinagar

[Jan '22- April '23]

- Runner Up at Antaragnee event of the college cultural fest, Blithchron'22 and was the best troop with huge crowd.
- o Actively engaged in various theatre workshops and events, integrating the essence of theatre into everyday life.

TECHNICAL SKILLS

- **Programming Languages:** Java, Python, HTML5
- Tools: SAP2000, QGIS, AutoCAD, LaTeX, Git, GitHub, Fire Dynamic Simulator, MS Excel, Word, Powerpoint
- IS Codes: IS 456:2000, IS 1893:2016, IS 13920:2016, IS 875:1987 (Part 1,2,3), IS 10262:2019, SP 16 and other standard codes

ACHIEVEMENTS

- Represented Telangana in the Association Games Federation's National Cricket Tournament, achieving a 6th place finish.
- Achieved a state rank of **1067** in Telangana EAMCET and **503** in Telangana POLYCET, and recognized as district topper.
- Champions in Kho Kho sport consecutively for 3 times in the Hallabol event, annual sports festival of IIT Gandhinagar.

EXTRA-CURRICULAR ACTIVITIES

- Cricket, Basketball, Volleyball, Badminton, Table tennis and other sports; Cultural activities: Theatre, Drama.
- Exploring different places through travelling and knowing the history of different places is the one which fuels me up.