Dhamini Reddy, LEED Green Associate

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EDUCATION

Texas Tech University, Lubbock, Texas — Expected Graduation: May 2021
Master of Science, Civil Engineering
Specialization in **Structural Engineering** — **GPA-3.77**

Visveswaraya Technological University, Bengaluru, India — August 2015 – July 2019
Bachelor of Engineering, Civil Engineering — **GPA-8.48/10**

NCEES, FE Civil - 2020
https://account.ncees.org/rn/2093526-1338845-08f59e0

GBCI, LEED Green Associate – 11420399-GREEN-ASSOCIATE

EXPERIENCE

Graduate Assistant, Texas Tech University — August – Dec 2020
- Evaluated and graded examinations, assignments, or papers, and record grades.
- Supervised laboratory work.

R M Consultants, Bengaluru, India
Engineering Intern — July – August 2018
- Cost and quantity estimation of the building using centerline method, Composite masonry, Sustainable biogas production, types of compound walls and, foundation types in black cotton soil.
- Collaborated with the 5 team members and completed the project efficiently on cost estimation of a single room.

PROJECTS

Structural Reliability of offshore platform, TTU — Spring 2020
- Designed SPAR platform against hurricane Katrina (2005) – The dimensions for the platform were assumed and the wave loading was calculated from Morison's equation from the NOVAA buoy 42040 by considering significant wave height and average wave period.
- Five random variables dead load, live load, morning forces in the anchors, Buoyancy forces are assumed to be lognormally distributed, and Wave load is assumed to have Rayleigh distribution. A simple limit state function with the above variables is considered.
- The limit state function was analyzed for the reliability of the structure by Nataf Distribution and Monte Carlo stimulation. The platform was 99.62% times reliable by Nataf distribution with the correlation between variables.

LEED Gold Certification, TTU — Spring 2020
- Effectively produced sustainable strategies for new construction, Single-family home with 4400 Square ft of the building footprint, two levels in Chicago, Illinois was considered.
- Reduced parking footprints, Rainwater harvesting, WaterSense labeled faucets and fixtures, Xeriscaping, passive solar design, Energy star labeled equipment's, Low VOC emitting materials, FSC wood, use of fly ash, Access to quality transit, and others.
- A total of 71 points out of 110 possible points was achieved, which qualifies for Gold certification.

Mini project

- New tank Project, Old tank Project, Public Health and Engineering, Highway Project, and Town Planning
- Surveyed by Total station. Also came up with a more appropriate sewerage plan

Main project

- Experimental study on Partial Replacement of Cement by Marble Dust in concrete.
- M30 grade was used for mix design, 5,10,15, and 20% of cement was replaced by marble dust. 7 day and 28 days compressive strength was tested. Compressive strength increased up to 10% replacement of cement and future increase in marble dust content reduces the compressive strength at 7 and 28 days.
- The main incentive to choose this topic is to achieve sustainable development since marble dust is a byproduct of the marble industry. As the composition of marble varies with the geographical location, hence the composition of the marble should be considered.

RELEVANT COURSEWORK

Structural Reliability | Sustainable Building Design | Machine Learning for Civil Engineering | Structural Analysis I | Advanced Reinforced Concrete Design | Advanced Concrete Materials | Mechanics of Solids | Numerical Method | Advanced Foundation Engineering | Finite Element Methods (Spring 2021)

SKILLS

Engineering and Programming: **AutoCAD, AutoCAD 3D, STAAD Pro, ETABS, GIS Software, Basic C, Python, and R**
General Programs: Microsoft Office Certified

INVOLVEMENT

- American Society of Civil Engineers (ASCE)
- Participated in the 7th Edition of Concrete Fair 2018
- Secured district rank in International Chithana Science Examination (2004-2005)
- Completed 2 levels of Abacus training by GKidz skoolKAT
- Secured the Second rank in National Level in Mathematics talent search Examination
- Contributor to HelpAge India participated in a fundraising program for the rehabilitation of the differently-abled at Deepa Academy