

# SHREY RANA

220 West, Sherman Avenue, Edison, NJ | (848) 997-0522 | [sr6345@nyu.edu](mailto:sr6345@nyu.edu)

## ACADEMICS

---

**New York University, Tandon School of Engineering, Brooklyn, NY**

**September 2022- May 2024**

Master of Science in Civil Engineering.

GPA: 3.89

Merit Scholarship, \$9000.

Relevant Course: Structural Dynamics, Bridge Engineering, Project Management for Construction

**Birla Vishvakarma Mahavidyalaya, Gujarat, India**

**July 2018 – May 2022**

Bachelor of Technology in Civil Engineering,

GPA: 4.00.

Relevant Course: Mechanics of Solids, Structural Analysis, Earthquake Engineering, Repair and Rehabilitation of Structures.

## PROFESSIONAL EXPERIENCE

---

**Engineering Intern, RKC Infrabuilt, Daman, India**

**February 2021 – July 2021**

- Assisted project manager in construction of jetty and sea wall as a part of the coastal line beautification in Daman.
- Studied civil drawings to effectively manage the site. Assisted in pile placing at the jetty and maintained daily logs of materials.
- Gained exposure in the waterfront site and labor management which developed leadership and problem-solving skills.

**Engineering Intern, Shanti Construction, Daman, India**

**July 2021 – August 2021**

- Supervised a construction team of 10 in the construction of shear wall at 500 bedded hospital in Daman.
- Ensured construction was completed on schedule and meet the compliance of Indian Standards.
- Gained valuable experience working in the field and studying the structural and architectural drawings.

**Engineering Intern, Vijay Mistry Construction Pvt.Ltd, Daman, India**

**November 2020 – January 2021**

- Assisted site engineer on a precast segmental post-tensioned bridge project in Daman.
- Studied structural drawings to overlook the reinforcement process of pier cap and abutments.
- Developed basic understanding of post-tensioned bridge structural design and drawings.

## ACADEMIC PROJECTS

---

**STUDY ON THE PERFORMANCE OF COVID WASTE IN CONSTRUCTION COMPONENTS.** 8<sup>th</sup> Semester 2022

- Studied the material properties and designed mix for M25 concrete with Biomedical waste to utilize the waste being disposed off.
- The designed mix achieved a compressive strength 20% higher than the nominal M25 concrete with no waste in it.
- Received grant of Rs. 100,000 from State government and requests for R&D by Industry professionals.

**STRUCTURAL DYNAMIC ANALYSIS AND RETROFITTING OF SQUIBB PARK PEDESTRIAN BRIDGE.** Fall 2022

- Carried out dynamic analysis of the original structure facing serviceability issue to determine acceleration response.
- Retrofitting methods with detailed analysis were suggested based on acceleration response to resolve serviceability issue.
- Developed the skill set to conduct the dynamic analysis and calculations of various retrofitting methods proposed.

**STRUCTURAL DESIGN OF 500 FEET BRIDGE IN ACCORDANCE WITH LRFD TO CARRY VEHICULAR LOAD.** Fall 2022

- Designed structural components like Concrete Deck and Prestressed girder for serviceability following AASHTO LRFD Bridge Design specifications.
- Carried out quantity take off to compare the cost differences for the two alternatives designed i.e., Concrete and Steel.
- Developed the skillset to design the structural members with the aide of Excel and Bridge Link.

## SKILLS

---

MS Excel, MS Word, AutoCAD, AutoCAD Civil 3D, STAAD Pro, QGIS.

## HONORS & AWARDS

---

- Gold medal for the highest CGPA in Civil Department at Birla Vishvakarma Mahavidyalaya.
- Silver Medal for second highest CGPA at Birla Vishvakarma Mahavidyalaya.
- Gold Medal for the highest grade in Fluid Mechanics at Birla Vishvakarma Mahavidyalaya.
- Felicitated with Gold medal by Gujarat Institute of Civil Engineers and Architecture.
- Head of Tech & Tour in IE(I) students' chapter civil.