

## SAMPATH KUMAR SHIVAIAHGARI

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### EDUCATION

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**Master of Science, Structural Engineering (GPA-3.78/4)**  
Rutgers ,the State University of New Jersey, NJ

May 2017

**Bachelors of Technology in Civil Engineering (GPA-8.98/10)**  
Sri Ramaswamy Memorial University (SRM University), Chennai (T.N), India

May 2015

### SKILLS:

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- AutoCAD 2016, Staad pro , GEO-Studio, RS MEANS, Autodesk ,ETABS,MEPDG,SAP2000.
- General Computer Skills: MS Office, Operating Windows

### WORK EXPERIENCE

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**Research Assistant, Center for Advanced Infrastructure and Transportation ,New Jersey, USA**

August 2015-May2016

- Worked on over coating of steel bridges and served as the impact echo operator for field testing of bridges.

**Field Engineer Trainee, Rajeshwari Infrastructure, Chennai, India**

Summer 2014

- Studied different types of Form Works used for construction. Designed and Analyzed Residential Buildings
- Coordinated weekly site meetings. Monitored documentation errors.
- Prepared monthly reports on status of the project budgets and submittals. Coordinated and directed multiple subcontractors over the phone, via email and person

**Field Engineer Trainee, BHEL Ltd, Hyderabad, India**

Summer 2013

- Studied tunnel construction made of steel reinforced concrete.
- Updated schedule and created baseline schedules for three story building and tunnel. Prepared site inspection reports and safety reports for quality management
- Estimated the amount of concrete and steel for these structures.
- Estimated the various construction activities including trades and quantity take-off of performed tasks using design specifications and AutoCAD software,assisted in drafting all documents required for submittals and change orders.

### ACADEMIC PROJECTS

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**Research work on Performance of Hybrid Fiber Reinforced Concrete**

Fall 2016

- Compared the various properties of Fiber Reinforced Concrete and Hybrid Fiber Reinforced Concrete under loading.
- Compression strength and bending behavior of Hybrid Fiber Reinforced Concrete are analyzed.
- Used MEPDG software to compare the effects of Hybrid Fiber Reinforced Concrete and Ordinary concrete on pavements

**Design of a Stadium Structure-(Steel design project)**

Fall 2015

- Designed a stadium using AISC manual and software such as Staad pro was used for design purpose .

**Evaluation of bending moment capacity of a plate girder(Structural reliability project)**

Fall 2015

- Various reliability methods for developing the partial safety factors (PSFs) for the girder in bending were used. The loads used in this project were calculated using ASCE manual. The model for this project was developed using Monte-Carlo Simulation Technique. The plate girders were designed using AISC manual.

**Use of Frictional Pendulum Bearing System(FPBS) for multi-storey building**

Spring 2014

- Analyzed and Designed a multi-storey building using Frictional Pendulum Bearing System(FPBS). In FPBS, structures are protected against damage by reducing the seismic force transferred to it. Designed structural elements in the building according to specification of Indian Standard(IS) codes. Analyzed and Designed various elements of building using software tool like SAP2000 and STAAD foundation

### EXTRA CURRICULAR ACTIVITIES

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- **Grader** for structural steel design class at Rutgers University.
- Participated in **Aarush** and **Milan** – A College Technical Event. Worked as an National Service Scheme (NSS) member in College.
- Participated in **Not Anymore** Program by Rutgers university which is to fight against sexual abuse.
- **Intramural** for Rutgers Volleyball game
- Active Member of Indian Concrete Institute.