# E:\NBA - 09\SVEC 100 - Logos\SVEC New Logo.jpgSREE VIDYANIKETHAN ENGINEERING COLLEGE

(Affiliated to Jawaharlal Nehru Technological University Anantapur) Sree Sainath Nagar, A. Rangampet, Tirupati – 517 102, Chittoor Dist., A.P.

**DEPARTMENT OF COMPUTER SCIENCE AND SYSTEMS ENGINEERING**

**CERTIFICATE**

This is to certify that the Socially Relevant Project-I entitled

**REAL TIME EFFICIENT STREETLIGHT CONTROLLING AND MONITORING SYSTEM**

is the Bonafide work done by

|  |  |
| --- | --- |
| **S.Dhanasekharreddy** | **19121A1595** |
| **P.Balaji** | **20125A1504** |
| **N.Diwakar** | **19121A1573** |
| **S.Vinay** | **19121A15A6** |
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In the Department of Computer Science and Systems Engineering, Sree Vidyanikethan Engineering College, A. Rangampet. is affiliated to JNTUA, Anantapuramu in partial fulfillment of the requirements for the award of Bachelor of Technology in Computer Science and Systems Engineering.

This is work has been carried out under my guidance and supervision.

The results embodied in this Project report have not been submitted in any University or Organization for the award of any degree or diploma.

**Internal Guide Head**

**Ms.S.Anbulakshmi Dr. A. Balasubramani**

Assistant professor Prof & Head

Dept of CSSE Dept of CSSE

Sree Vidyanikethan Engineering College Sree Vidyanikethan Engineering College Tirupathi Tirupathi

**INTERNAL EXAMINER EXTERNAL EXAMINER**

**REAL TIME EFFICIENT STREETLIGHT CONTROLLING AND MONITORING SYSTEM**

A Socially Relevant Project-I Report submitted to

JAWAHARLAL NEHRU TECHNOLOGICAL UNVERSITY ANANTAPUR.

In Partial Fulfillment of the Requirements for the Award of the degree of

BACHELOR OF TECHNOLOGY IN

COMPUTER SCIENCE AND SYSTEMS ENGINEERING BY

|  |  |
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| **S.Dhanasekharreddy** | **19121A1595** |
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|  |  |

Under the Guidance of

**Ms.S.Anbulakshmi**

Assistant professor



Department of Computer Science and Systems Engineering

# SREE VIDYANIKETHAN ENGINEERING COLLEGE

(Affiliated to JNTUA, Anantapuramu) Sree Sainath Nagar, Tirupathi – 517 102 2021-2022

**DEPARTMENT OF COMPUTER SCIENCE AND SYSTEMS ENGINEERING**

**VISION AND MISSION**

## VISION

* **To become a Centre of excellence in Computer Sciences and Systems Engineering through Teaching, Training and Innovation to produce high quality engineering professionals who can solve the growing complex problems of the society and industry.**

## MISSION

### Established with cause of development of Technical education in advanced Computers Sciences and Systems Engineering with applications to systems there by serving the society and Nation.

* **Transfer of knowledge through contemporary curriculum and fostering faculty and student development.**

### Create keen interest for research and innovation among students and faculty by understanding the needs of the society and industry.

* **Skill Development among diversity of students in technical in technical domains and profession for development of systems and processes to meet the demands of the industry and research.**

### Imbibing values and ethics in students for prospective and promising engineering and develop a sense of respect for all.

## Program Educational Objectives (PEO’s)

**After few years of graduation, the graduates of B.Tech(CSSE) will:**

|  |  |
| --- | --- |
| 1. | Demonstrate competencies in the Computer Science domain and Management  with an ability to comprehend, analyze, design and create software systems for pursuing advanced studies in the areas of interest. |
| 2. | Evolve as entrepreneurs or be employed by acquiring required skill sets for developing computer systems and solutions in multi-disciplinary areas. |
| 3. | Exhibit progression and professional skill development in Computer programming and systems development with ethical attitude through life-long learning. |

## Program Specific Outcomes (PSO’s)

**On successful completion of the Program, the graduates of B. Tech (CSSE) program will be able to:**

|  |  |
| --- | --- |
| **PSO1** | Employ Systems Approach to model the solutions for real life problems, design and  develop software systems by applying Modern Tools. |
| **PSO2** | Develop solutions using novel algorithms in High Performance Computing and Data  Science. |
| **PSO3** | Use emerging technologies for providing security and privacy to design, deploy and  manage network systems. |

## Program Outcomes (PO’s)

1. Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems (**Engineering knowledge**).
2. Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences (**Problem analysis**).
3. Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations (**Design/development of solutions**).
4. Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions (**Conduct investigations of complex problems**).
5. Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations (**Modern tool usage**)
6. Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice (**The engineer and society**)
7. Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development (**Environment and sustainability**).
8. Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice (**Ethics**).
9. Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings (**Individual and team work**).
10. Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions (**Communication**).
11. Demonstrate knowledge and understanding of the engineering and management principles and apply these to one’s own work, as a member and leader in a team, to manage projects and in multidisciplinary environments (**Project management and finance**).
12. Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change (**Life-long learning**).

## Course Outcomes

COURSE OUTCOMES: After successful completion of the course, the students will be able to:

CO1. Create/Design engineering systems or processes to solve complex societal problems using appropriate tools and techniques following relevant standards, codes, policies, regulations and latest developments.

CO2. Consider environment, sustainability, economics and project management in addressing societal problems.

CO3. Perform individually or in a team besides communicating effectively in written, oral and graphical forms on socially relevant project.

## Socially Relevant Project- I CO-PO-PSO Mapping

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Course Outcomes** | **Program Outcomes** | | | | | | | | | | | | **Program Specific Outcomes** | | |
| **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** | **PSO1** | **PSO2** | **PSO3** |
| **CO1** | 3 | 3 | 3 | 3 | 3 | 3 | - | 3 | - | - | - | 3 | 3 | 3 | 3 |
| **CO2** | - | - | - | - | - | - | 3 | - | - | - | 3 | - | 3 | 3 | 3 |
| **CO3** | - | - | - | - | - | - | - | - | 3 | 3 | - | - | 3 | 3 | 3 |
| **Average** | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| **Level of correlation of the**  **course** | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

**Level of Correlation: 3 - High 2 - Medium 1 - Low**

## DECLARATION

We hereby declare that this project report titled “**REAL TIME EFFICIENT STREETLIGHT CONTROLLING AND MONITORING SYSTEM”** is a genuine Socially Relevant Project - I work carried out by us, in **B.Tech *(Computer Science and Systems Engineering)*** degree course of **Jawaharlal Nehru Technological University Anantapur** and has not been submitted to any other course or University for the award of any degree by us.

Signature of the student 1.

2.

3.

4.

### ACKNOWLEDGEMENT

We are extremely thankful to our beloved Chairman and founder **Dr. M. Mohan Babu** who took keen interest to provide us the infrastructural facilities for carrying out the project work.

We are highly indebted to **Dr. B.M. Satish**, Principal of Sree Vidyanikethan Engineering College for his valuable support and guidance in all academic matters.

We are very much obliged to **Dr. A. Balasubramani,** Professor & Head, Department of CSSE, for providing us the guidance and encouragement in completion of this project.

We would like to express our indebtedness to the project coordinator, **Coordinator Name**, designation, Department of CSSE for his valuable guidance during the course of project work.

We would like to express our deep sense of gratitude to **Ms.S.Anbulakshmi**, Assistant professor, Department of CSSE, for the constant support and invaluable guidance provided for the successful completion of the project.

We are also thankful to all the faculty members of CSSE Department, who have cooperated in carrying out our project. We would like to thank our parents and friends who have extended their help and encouragement either directly or indirectly in completion of our project work.