

### SREE 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 ENGINEERING

## **CERTIFICATE**

This is to certify that the Project Work entitled

"Using Optimization to improve picking routes"

is the bonafide work done by

K C KISHORE KUMAR 15121A0584
K S D N V S CHANDU RAM 15121A0579
K R SAI KUMAR 15121A05A3
K SIVAJI NAIK 15121A05A0
K BHAVANA 15121A05B7

In the Department of Computer Science and 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 Engineering during 2015-2019.

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

Mr. Shaik Salam M.E.,(Ph.D)

Associate Professor

Dept of CSE

Dr. M. Sunil Kumar

Prof & Head

Dept of CSE

S.V.E.C S.V.E.C A.RANGAMPET A.RANGAMPET

INTERNAL EXAMINER EXTERNAL EXAMINER

# "USING OPTIMIZATION TO IMPROVE PICKING ROUTES"

# A Project 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 ENGINEERING BY

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Under the Guidance of

Mr. Shaik Salam M.E.,(Ph.D)
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Department of Computer Science and Engineering

### SREE VIDYANIKETHAN ENGINEERING COLLEGE

(Affiliated to JNTUA, Anantapuramu) Sree Sainath Nagar, Tirupathi – 517 102 2015-2019

# **DECLARATION**

We hereby declare that this project report titled "USING OPTIMIZATION TO IMPROVE PICKING ROUTES" is a genuine project work carried out by us, in B.Tech (Computer Science and 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

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We are very much obliged to **Dr. M. Sunil Kumar,** Professor & Head, Department of CSE, for providing us the guidance and encouragement in completion of this project.

We would like to express our indebtedness to the project coordinator, **Mr. Shaik Salam**, Associate Professor, Department of CSE for his valuable guidance during the course of project work.

We would like to express our deep sense of gratitude to the guide **Mr. Shaik Salam**, Associate Professor, Department of CSE, for constant support and invaluable guidance provided for the successful completion of the project.

We are also thankful to all the faculty members of CSE 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.