#### TECHNICAL SEMINAR REPORT

ON

# **CONNECTED VEHICLES**

Submitted in Partial fulfilment for the VIII Semester, BE, Information Science & Engineering

Prescribed By:

#### VISVESVARAYA TECHNOLOGICAL UNIVERSITY

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DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

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### DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

## **CERTIFICATE**

Certified that the Technical Seminar entitled **CONNECTED VEHICLES** carried out by **Ms. SUSHMITHA K** bearing USN of **1GA15IS045**, a bonafide student of VIII Semester, in partial fulfilment for the award of **Bachelor of Engineering** in **Information Science & Engineering**, of the Visvesvaraya Technological University, Belgaum, during the year **2018-2019**. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report. This seminar report has been approved as it satisfies the academic requirements for Technical Seminar (15CSS86) prescribed for the said degree.

Signature of the Guide
KRUPA K S
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Signature of the Seminar Coordinator

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### **ABSTRACT**

The term connected vehicles refers to applications, services, and technologies that connect a vehicle to its surroundings. A connected vehicle includes the different communication devices (embedded or portable) present in the vehicle, that enable in-car connectivity with other devices present in the vehicle and/or enable connection of the vehicle to external devices, networks, applications, and services. Applications include everything from traffic safety and efficiency, infotainment, parking assistance, roadside assistance, remote diagnostics, and telematics to autonomous self-driving vehicles and global positioning systems (GPS). Typically, vehicles that include interactive advanced driver-assistance systems (ADASs) and cooperative intelligent transport systems (C-ITS) can be regarded as connected. Connected-vehicle safety applications are designed to increase situation awareness and mitigate traffic accidents through vehicle-to-vehicle (V2V) and vehicle-toinfrastructure (V2I) communications. ADAS technology can be based on vision/camera systems, sensor technology, vehicle data networks, V2V, or V2I systems. Features may include adaptive cruise control, automate braking, incorporate GPS and traffic warnings, connect to smartphones, alert the driver to hazards, and keep the driver aware of what is in the blind spot. V2V communication technology could mitigate traffic collisions and improve traffic congestion by exchanging basic safety information such as location, speed, and direction between vehicles within range of each other. It can supplement active safety features, such as forward collision warning and blind-spot detection.

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