






TECHNOLOGY DEVELOPMENT PROGRAM SMART CITIES AND SOCIETIES

PARVAT

Prevention of accidents in hilly routes by virtue of automated technology

Typical arrangement of PARVAT in blackspot areas



-  Magnetic loop sensor
-  VISIBILITY DETECTION SENSOR
-  DISPLAY INDICATORS
-  PROCESSING UNIT
-  SURFACE MOISTURE DETECTION SENSOR

Issue Being Addressed

- ▶ The avian species inflict losses in agriculture by damaging crops
- ▶ Also, Animals/Reptiles account for damage to food grains

Key Feature of the Technology/Product /App Which is Being Developed

- ▶ Writing programs to interpret the input signals from suitable sensors and testing those programs with random input data, and will write suitable programs and connect data with the output display unit by predicting the location and speed of the vehicles

CPS Relevance

- ▶ Integrating a surface friction detection and visibility sensor with CPS to detect road friction and visibility in different weather conditions and alert drivers for low visibility, maximum safe velocity, and possible challenges

Impact & Benefits

- ▶ Inform or alert in real-time for multiple factors which could lead to mishaps at road writing programs to interpret and predict the location and speed of the vehicles which eventually prevents the accident in the hilly routes
- ▶ Predicting the location and speed of the vehicles eventually prevents the accident on the hilly route and is helpful for authorities responsible for hilly road prevention

Team

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Targeted Customers & End Users

- ▶ Authorities responsible for hill road prevention
- ▶ MoRTH
- ▶ NHAI

Commercialization Status

- ▶ This will have potential application for stakeholders like MoRTH, NHAI and the authorities responsible for hilly road prevention