# **Social Ideathon Participation**

by

# **Department of Computer Science**

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Venue: Sreelakam lifelong learning institute, Cherpu

## **Report of the event**

Ms. Reesha P U, Assistant Professor, and students Devika P Shaju and Nazrin K A from the III B.Voc. Software Development program, participated in the Social Ideathon organized by Sreelakam Life Long Learning Institute. The team presented an innovative idea addressing the issue of "Pothole Detection and Recovery" and secured a prominent prize for their outstanding contribution.

### **Event Overview:**

The Social Ideathon, hosted by Sreelakam Life Long Learning Institute, aimed to foster innovative thinking and problem-solving by inviting participants to propose solutions to significant societal challenges. The event facilitated a dynamic platform for participants to present creative ideas with the potential for real-world impact.

## **Participants:**

- 1. Ms. Reesha P U Assistant Professor, Department of Computer Science
- 2. Devika P Shaju III B.Voc. Software Development
- 3. Nazrin K A III B.Voc. Software Development

#### **Idea Presentation: Pothole Detection and Recovery:**

The team's idea focused on the prevalent issue of potholes in urban infrastructure and presented an integrated solution for their identification and rectification. The concept hinged on leveraging contemporary technology to establish a comprehensive system capable of efficiently detecting potholes, notifying relevant authorities, and streamlining the repair process.

#### Key Features of the Idea:

 Advanced Sensing Mechanism: The team proposed the utilization of cutting-edge IoT devices, such as accelerometers and cameras, to monitor and detect road conditions in real time. These devices would be strategically deployed on vehicles to collect data about road irregularities during transit.

- 2. **Data Analytics and AI Integration:** The collected data would be channeled into a central system empowered by sophisticated machine learning algorithms. These algorithms would progressively learn to differentiate between standard road imperfections and genuine potholes, enhancing accuracy over time.
- 3. **Instantaneous Alert System:** Upon identifying a pothole, the system would trigger an immediate alert to the relevant authorities. This swift response mechanism would expedite actions to rectify the issue, thereby reducing road hazards and potential accidents.
- 4. **Community Engagement Platform:** The team also proposed the incorporation of a mobile application enabling users to report potholes. By involving the community, the system's effectiveness would be augmented, as citizens contribute to the identification process.
- 5. Efficient Repair Management: To optimize the repair process, the team suggested a centralized database to log reported potholes and ongoing repairs. This data-driven approach would facilitate resource allocation and task prioritization.

The team's innovative concept and well-structured presentation captured the attention of both the judging panel and fellow participants. Their comprehensive solution to the persistent problem of potholes received accolades for its feasibility and potential impact. As a testament to their exceptional participation, Ms. Reesha P U, Devika P Shaju, and Nazrin K A were honored with a prize, celebrating their outstanding contribution to the ideathon.



