KPIT SPARKLE

i can crack IT

CONTEST

01

What is i Can Crack IT?

This year KPIT launches a new challenge related to real time Industrial problems. Here the problem statement is given by KPIT and solution is provided by students. KPIT shall also provide the required environment, useful links, and access to data available for research. This gives an opportunity to students for filling a Joint patent with KPIT. This contest allows students to add one faculty as a team member.

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02 Theme for i Can Crack IT

Students can submit their innovation by choosing following categories. Participants can select one or more problem statements to solve.

Categories	Problem Statements
Automotive Cybersecurity	• Device Authentication Mechanism over LIN • Fuzz Testing on LIN based Implementations • Identify and Validate Vulnerabilities using Pentration Testing • Security Assessment of Secure Flashing and Bootloader • Security Assessment of Autonomous Vehicles
Connected Vehicles	• Biker to Biker Communication • Optimum Routing for On - Demand Delivery
Infotainment	• Automotive Init • Qt Quick Optimization • App Armor SMACK SE Linux Evaluation for KIVI • Calendar Integration Using Konnect • Fastboot • HCI Snoop Log • Intelligent Testing System • KD Bus Migration • MFI Trace Parser Tool

Autonomous Driving	• Design and develop efficient multiple object tracking algorithm • Automatic Number Plate Recognition (ANPR) for different fonts and non-Roman scripts • Gaze, Micro-gestures and Hand-signal Detection of law-enforcement officers and other road-users • Detection of kerb-side parking-slot, with poor kerb-side/lane-markings
Electric Vehicle	• Motor Efficiency • SoH (State of Health) • Optimization of Battery Thermal Management
Powertrain	• Fusion of Physics and Machine Learning
Alternative Powertrain	• Solid State Battery • Hydrogen Storage • Hydrogen Purification
Automotive Diagnostics	• Human Less
Tools	• Expense recognition Software Challenge • Current way of test Automation
Analytics	• EV Schedule Generation and Optimization

E.g – Once a student registers for **i Can Crack IT,** they can select any category mentioned above and select the problem statement. After selecting the problem statement, you shall get a document which specifies in detail about the problem statement selected.

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03 Who can participate?

This innovation platform is for all students of undergraduate, post-graduate and PhD courses from Science, Engineering, Design and Management colleges and universities across India.

Student can participate either as an individual (=1 member) or as a team (maximum team size: 3 members including a Professor).

There is no restriction on team configuration; team members can be from same or different department(s), branches and colleges.

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04 Things You need to know before participating!

**Visit
https://sparkle.kpit.com**

01

**Register by filling in
relevant information.**
All team members to
register individually.
Team leader can add
up to 2 members
to form the team

02

Select i Can Crack IT

03

**Select problem statement
you wish to solve**

04

**Accept the terms and
conditions to proceed**

05

**Read Problem Statement
Document carefully to
know deliverables
and milestones**

06

**Your team shall
have a unique sparkle
ID generated.
e.g. SP20C00001**

07

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Things You need to know before participating!

Submit the expected output mentioned in milestone 1

08

Submitted ideas/ solutions shall be evaluated for next milestone selection

09

Participants completing Milestone 2 shall compete for Awards

10

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05

Benefits

1 **Joint IP opportunities with KPIT**

2 3rd year UG and 1st year PG Students completing Milestone 1 shall be eligible for Internships

3 Industry Exposure Program for Professors who are part of the team completing Milestone 1

4 **Win 20 awards of 50K**

*Conditions apply

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06 Timeline:

Timeline for this contest totally depends on the problem statement selected by you. It shall be available on your idea card once you select problem statement.

07 Awards:

20 Awards of ₹50,000/- each.

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thank you