Sample Software Problem statements

- Title: **Employee/ visitor/suspect recognition from CCTV footages**

- Description: CCTV cameras are fitted on our every building but video footages from them are currently just dumped. No application is available which can automatically recognize a facial images in CCTV footage and compare it with the photo database of our employees to identify the person in real time. Availability of such an application could be useful for security reasons to identify suspects /visitors/trespassers. This can be used to locate the position of staff in our premises, who is not on his seat and required urgently at some place.

- YouTube Link: <a 1 minute video describing the problem statement>
- Nature: Baseline/ Complex/ Very Complex
- Category: Software/ Hardware+ Software
- Technology Bucket: (e.g. Software – Web development, Software- Mobile App development)

- Title: **Ensuring timely Parcel delivery and collecting customer's feedback for the offered services in tamperproof manner**

- Description: Currently, postman delivers a parcel and takes signature from customer in paper format. No live/online feedback mechanism is available to check customer's satisfaction. Also chances are that postmen can tamper with the feedback to suit their requirements. We wish to have a foolproof system which will enable use to collect customer's feedback without allowing postman to tamper with the feedback

- YouTube Link: <a 1 minute video describing the problem statement>
- Nature: Baseline/ Complex/ Very Complex
- Category: Software/ Hardware+ Software
- Technology Bucket: (e.g. Software – Web development, Software- Mobile App development)

- Title: **E-Toll System**

- Description: Traffic congestion at Toll Plazas is creating huge economical loss in terms of fuel wastage apart from adding to environmental pollution. An application may be developed to have QR equipped Payment Receipt for long distance vehicles which can be scanned at the QR readers installed at unmanned toll lanes for passing through the toll gates.

- YouTube Link: <a 1 minute video describing the problem statement>

- Nature: Baseline/ Complex/ Very Complex

- Category: Software/ Hardware+ Software

- Technology Bucket: (e.g. Software – Web development, Software- Mobile App development)

- Title: **Reducing burden of head load for villagers**

- Description: Many of the villagers do not have road access up to their houses, many of them will have to head load it for more an a kilometer at times. This load are carried uphill on the back or using basket on their head which put the whole weight on the body and at the same time they will have to walk uphill.

  What we want: A device which will carry heavy load between 50 kg to 200 kg and can run on Cement Concrete Foot-path which has stairs or a device which can reduce the burden of the load from the body and the weight of the item is taken by the device etc.

- YouTube Link: <a 1 minute video describing the problem statement>
- Nature: Baseline/ Complex/ Very Complex
- Category: Software/ Hardware+ Software
- Technology Bucket: (e.g. Software – Web development, Software- Mobile App development)