

SIH 2020 - Problem Statements-Software

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S.No	Organization	Problem Statement	Category	PS Number	Technology Bucket
1	CDK Global	Portal for Farmers to sell the produce at a better rate	Software	RA27	Agriculture and Rural Development
2	CDK Global	Crop Guidance and Farmers Friend • Problem Title : Helping the farmers in terms of Crop suggestion, precautions based on the met department forecast of rain fall/ weather, potential pest attacks , weather warnings etc.	Software	RA28	Agriculture and Rural Development
3	Central Warehousing Corporation	Auto Climate Monitoring System	Software	BK263	Agriculture and Rural Development
4	Cognizant Technology Solutions India Pvt. Ltd	Food processing	Software	MS450	Agriculture and Rural Development
5	Central Ground Water Board, Ministry of Jal Shakti	Assessment of land holding pattern, source of irrigation, cropping pattern and depth of the wells in different parts of the country	Software	DM83	Agriculture and Rural Development
6	Gov of Uttarakhand	Lack of technological intervention in value addition of agriculture products produced by SHGs/FPGs	Software	MK100	Agriculture and Rural Development
7	Ministry of Agriculture Cooperation and Farmer Welfare	The position of an object in the air can be indicated by latitude, longitude and altitude for a given time. A trajectory is a stream of such quadruples(time, latitude, longitude and altitude) Given a large set of such trajectories, without any other information , problem is to cluster them into meaningful objects such as Helicopter, Fighter/civilian Aircraft, UAV, Cruise Missile, dropped bomb etc. An optimal scalable solution is desired using open source tools.	Software	SB109	Agriculture and Rural Development

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8	Dr. B R Ambedkar Institute of Technology	Software for computerization of farmer, land details along with beneficiary schemes details	Software	DS157	Agriculture and Rural Development
9	Government of Andhra Pradesh	Livestock Ownership Database	Software	KB194	Agriculture and Rural Development
10	Ministry of Rural Development	Automatic Assessment of Pavement condition based on road photographs	Software	MK199	Agriculture and Rural Development
11	Ministry of Rural Development	One Nation - One Citizen - One Pension - Identify citizens receiving multiple benefits like pensions under different schemes of the centre and state, such as NPS, NSAP Schemes, PMSYM and State level schemes	Software	MK207	Agriculture and Rural Development
12	Govt. of Bihar (DOA)	Estimation of crop progression	Software	NS269	Agriculture and Rural Development
13	Govt. of Bihar (DOA)	Estimation of crop yield using modern ICT tools which is quick and reliable for making a realistic plan for procurement and to compensate farmers for yield loss if any.	Software	NS270	Agriculture and Rural Development
14	Govt. of Bihar (DOA)	Develop a real time land usage monitoring tool using satellite data and artificial intelligence etc	Software	NS275	Agriculture and Rural Development
15	Govt.of Sikkim	MIS for Rural development Housing Scheme like Garib Awas Yojana along with GIS application	Software	SG293	Agriculture and Rural Development

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16	Indian Space Research Organisation (ISRO)	Extraction of crop cycle parameters from multi-temporal data	Software	NM372	Agriculture and Rural Development
17	Govt. of Bihar (DOA)	Estimation of crop yield using modern ICT tools which is quick and reliable for making a realistic plan for procurement and to compensate farmers for yield loss if any.	Software	PK409	Agriculture and Rural Development
18	Govt. of Bihar (DOA)	Develop a real time land usage monitoring tool using satellite data and Artificial intelligence etc.	Software	PK413	Agriculture and Rural Development
19	Govt. of Bihar (DOA)	Developing an e-enabled real time produce life cycle monitoring & sharing mechanism to enhance output realization to farmers through private sector participation and DBT	Software	PK414	Agriculture and Rural Development
20	Govt. of Bihar (DOA)	Enabling transparent price discovery and forecasting of crop arrival along with management and utilization of price stabilization funds in the case of agri - commodities	Software	PK416	Agriculture and Rural Development
21	Govt. of Bihar (DOA)	Developing a system or solution to provide a customized and precise land parcel specific fertilizer and input usage plan to reduce cost and maximize returns for the farmers	Software	PK417	Agriculture and Rural Development
22	Department of Science and Technology	Mobile App for sharing or pooling of transport for agricultural produce to market	Software	PR424	Agriculture and Rural Development

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23	GAIL	Process Modeling	Software	BK224	Energy / Renewable Energy
24	GAIL	Blockchain Powered Procurement System for GAIL	Software	BK225	Energy / Renewable Energy
25	GAIL	Design of alarms management and analytics	Software	BK226	Energy / Renewable Energy
26	MathWorks	Renewable Energy forecasting, for an integrated smart grid	Software	AG343	Energy / Renewable Energy
27	Ministry of Petroleum and Natural Gas	Technological advances for Retail Outlets	Software	AJ128	Energy / Renewable Energy
28	Ministry of Power	Remote Sensing/Satellite Imagery Application to Find Naturally Occurring Depression(s) Sites For Pump Storage Projects (PSP's)	Software	PK366	Energy / Renewable Energy
29	Indian Space Research Organisation (ISRO)	Detecting clouds and predicting their movement from INSAT imagery	Software	NM373	Energy / Renewable Energy

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30	FIS Global	Data Mining Robot using AI / ML	Software	SM445	Finance
31	Ministry of Women and Child Development	Book-keeping and Accounting software for IMOs	Software	AS34	Finance
32	Ministry of Women and Child Development	In PFMS implementation, NGOs registration may be approved by the concerned Ministry within a specific period. Otherwise, it should be deleted/rejected automatically by the PFMS portal itself. So that fresh registration can be done again by the implementing agency. For committed expenditure like salaries, pensions etc, direct link for sanction and release of funds to the Autonomous bodies to be made on quarterly basis. However, while considering final release UC/Account and UB be taken care of.	Software	AS37	Finance
33	Ministry of Housing and Urban Affairs	Cities provide more opportunities for people to grow economically. However, these opportunities are unequal because of knowledge asymmetry. How can we ensure that people have more equal access to better economic opportunities/ jobs?	Software	BC79	Finance
34	Ministry of Food Processing Industries	App Development on Food Processing Problems	Software	BK169	Food Technolog
35	Bajaj Fin Serv	Gamification for Health data collection	Software	CH46	Healthcare & Biomedical Devices
36	Bajaj Fin Serv	Lab Report Digitization / OCR	Software	VA47	Healthcare & Biomedical Devices

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37	GE Healthcare	Early Prediction of Sepsis from Clinical Data	Software	UP49	Healthcare & Biomedical Devices
38	Bajaj Fin Serv	Voice Prescription	Software	AP63	Healthcare & Biomedical Devices
39	GE Healthcare	Virtual Assistant for Medical Device	Software	UP176	Healthcare & Biomedical Devices
40	Yamaha Motor Solution India Pvt Ltd	Mobile game for Alzheimer's Disease detection	Software	DK287	Healthcare & Biomedical Devices
41	Amazon Web Services	Antimicrobial Stewardship Platform	Software	AN314	Healthcare & Biomedical Devices
42	Amazon Web Services	Elderly care system	Software	AN319	Healthcare & Biomedical Devices
43	Ministry of Health and Family Welfare	Digital tracking of children of migrant population to follow-up on their health status and immunization services received/to be given.	Software	SS41	Healthcare & Biomedical Devices
44	Ministry of Health and Family Welfare	Emergencies and disasters impact population health. Public health plays a critical role in working with health and non-health sectors responsible for preparing for and responding to emergencies. In emergencies, large numbers of people may require medical attention. Health care systems may be over-stretched, and public order may be threatened. Hence use of social media in public health emergency response.	Software	SS42	Healthcare & Biomedical Devices

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45	Ministry of Health and Family Welfare	Use of AI based Chat bots for providing health related information	Software	SS43	Healthcare & Biomedical Devices
46	Ministry of Health and Family Welfare	Leveraging block chain technology for creation of Electronic Health Record (EHR)	Software	SS45	Healthcare & Biomedical Devices
47	Ministry of Housing and Urban Affairs	People come to cities because of better health facilities as well. What should be done to improve the health facilities in the city and also provide equitable access for all?	Software	BC77	Healthcare & Biomedical Devices
48	Department of Atomic Energy	Fiducial localization for pre-operative planning in neurosurgery	Software	PC86	Healthcare & Biomedical Devices
49	Gov of Uttarakhand	1. Primary health care in remote areas using Cloud medicine and Diagnostic Services	Software	MK91	Healthcare & Biomedical Devices
50	Government of Andhra Pradesh	Livestock Health Database	Software	KB196	Healthcare & Biomedical Devices
51	TCI	PREDICTION OF TARIFF RATE	Software	PU131	Miscellaneous
52	Central Ground Water Board, Ministry of Jal Shakti	Data analytics to provide complete solution for groundwater management for the country	Software	DM84	Miscellaneous

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53	Dte of IT & Cyber Security, DRDO	Tool to recover Flash memory data	Software	CK116	Miscellaneous
54	Ministry of Women and Child Development	Effective use of Cyber Space and Cyber Technology to prevent violence against and trafficking of women and children	Software	AS120	Miscellaneous
55	Tripura Institute of Technology	Simplification of the process of e-tendering in EVC (electronic verification code) system, replacing Digital Signature Certificate by Aadhaar based OTP.	Software	DB126	Miscellaneous
56	Dte of IT & Cyber Security, DRDO	CAPTCHA/alternative solution for Visually impaired	Software	CK146	Miscellaneous
57	Department of Empowerment of Persons with Disabilities,	Problem Statement From PDUNIPPD (Software)	Software	PD150	Miscellaneous
58	Central Water Commission, Ministry of Jal Shakti	Embankment Mapping and Crowdsourced Health Card for Preventive Structural Measures	Software	SK153	Miscellaneous
59	Central Water Commission, Ministry of Jal Shakti	Water Accounting in Irrigation Commands through Crowd Sourced Crop Mapping	Software	SK155	Miscellaneous
60	Dr. B R Ambedkar Institute of Technology	Development of App to capture the field patrolling track of frontline staff in their forest beat jurisdiction	Software	DS164	Miscellaneous

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61	Govt of Puducherry	Job recommender system. To design a software application for assessing the abilities of a student with respect to employability.	Software	DK180	Miscellaneous
62	Ministry of Tribal Affairs	Development of repository of tribal youth talent from various areas such as sports, arts, paintings, dance, culture, social service or any specific area.	Software	DN262	Miscellaneous
63	Bureau of Police Research & Development	Real-Time image processing and forensic verification of Fake Videos	Software	RK309	Miscellaneous
64	Indian Space Research Organisation (ISRO)	Nowcasting of Meteorological Satellite Images using AI/ML techniques	Software	NM374	Miscellaneous
65	Ministry of Power	Monitoring the battery life of Electric Vehicles.	Software	LN382	Miscellaneous
66	Indian Space Research Organisation (ISRO)	GNSS Reflected Signal Coverage Simulator	Software	NM387	Miscellaneous
67	Indian Space Research Organisation (ISRO)	Hyperspectral image analysis tool	Software	NM388	Miscellaneous
68	Indian Space Research Organisation (ISRO)	AI/ML based system for deriving value added parameters using satellite surface observations	Software	NM390	Miscellaneous

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69	Indian Space Research Organisation (ISRO)	Reconstruction of missing data in Satellite Imagery	Software	NM391	Miscellaneous
70	Indian Space Research Organisation (ISRO)	Depth Estimation of Valles Marineris using ISRO's Mars Color Camera (MCC) images	Software	NM392	Miscellaneous
71	Indian Space Research Organisation (ISRO)	Field Data Analysis and Automated feature validation from crowd sourced field photos;	Software	NM393	Miscellaneous
72	Indian Space Research Organisation (ISRO)	Sentiment Analysis from text feedback:	Software	NM396	Miscellaneous
73	Indian Space Research Organisation (ISRO)	Voice command driven Web-GIS Applications (mobile/ desktop)	Software	NM397	Miscellaneous
74	Indian Space Research Organisation (ISRO)	Efficient Communication scheme for Human Space Flight Programme	Software	NM399	Miscellaneous
75	Indian Space Research Organisation (ISRO)	Link Adaptive Speech Compression scheme for Human Space Flight Programme	Software	NM400	Miscellaneous
76	Indian Space Research Organisation (ISRO)	Blind Scrambling Code Identification	Software	NM401	Miscellaneous

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77	Indian Space Research Organisation (ISRO)	Efficient Header Compression technique for IP based communication over Satellite network	Software	NM402	Miscellaneous
78	Indian Space Research Organisation (ISRO)	Customized Web-based animation for data cube, volume rendering and time series data visualization	Software	NM403	Miscellaneous
79	Indian Space Research Organisation (ISRO)	Size Invariant Ship detection from SAR Images	Software	NM404	Miscellaneous
80	Indian Space Research Organisation (ISRO)	Ethical hacking for extraction of restricted GNSS signal features	Software	NM406	Miscellaneous
81	Bharat Electronics Limited , Bengaluru	Open set Language Diarization for Indian Languages audio data	Software	MU456	Miscellaneous
82	Yamaha Motor Solution India Pvt Ltd	AGV Path Calculator	Software	DK454	Robotics & Drones
83	MIXORG	Create an affordable solution through image processing of number plates of vehicles for the detection, identification and monitoring of vehicles in different scenarios such as residential societies, tolls, business complex, parking spaces etc.	Software	CB31	Security & Surveillance
84	NCR Corporation (India) Private Limited	Authenticating User while performing transaction at ATM/POS Terminal Securely	Software	NH447	Security & Surveillance

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85	Bureau of Police Research & Development	Identify Solution with respect to Interstate & Inter Country Criminals e.g. Using Identity Inputs	Software	RK54	Security & Surveillance
86	Bureau of Police Research & Development	Criminal Navigation System/Extractor	Software	RK55	Security & Surveillance
87	Bureau of Police Research & Development	Community oriented policing (Digital Policing)	Software	RK57	Security & Surveillance
88	Bureau of Police Research & Development	Digital Solution to Combat Bribery & Justice Restoration System	Software	RK58	Security & Surveillance
89	Bureau of Police Research & Development	Cyber Crime Prevention	Software	RK59	Security & Surveillance
90	Bureau of Police Research & Development	Interactive map application for real time crime reporting	Software	RK60	Security & Surveillance
91	Dte of IT & Cyber Security, DRDO	Video based dynamic human authentication system for access control	Software	CK107	Security & Surveillance
92	Dte of IT & Cyber Security, DRDO	Clustering of Air objects based on trajectory	Software	CK108	Security & Surveillance

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93	Dte of IT & Cyber Security, DRDO	Identification of optimal set of multiple interceptor launch areas to maximise the destruction of multiple air targets	Software	CK115	Security & Surveillance
94	Directorate of Technical Education Chandigarh	Tracking and Control of inmate inside the Jail	Software	SS134	Security & Surveillance
95	CBSE	How to prevent cheating in exams?	Software	DA178	Security & Surveillance
96	NATIONAL CRIME RECORDS BUREAU	Artificial Intelligence (AI) and Machine Learning solutions for Police functions	Software	SK213	Security & Surveillance
97	NATIONAL CRIME RECORDS BUREAU	Data Crawlers to collect data	Software	SK216	Security & Surveillance
98	National Jute Board, Min of Textiles	Integrating identification of HS Codes and LCS checking at the International borders and improving the surveillance system.	Software	AR251	Security & Surveillance
99	Bureau of Police Research & Development	Tracking & Tracing of Fake News	Software	RK304	Security & Surveillance
100	Bureau of Police Research & Development	Detection of Malicious Content/Web Links related to Cyber Frauds	Software	RK305	Security & Surveillance

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101	Bureau of Police Research & Development	Detection of Malicious/Rogue/Honey-Trap Chatbot's at Social Media/other Web Platforms	Software	RK306	Security & Surveillance
102	Bureau of Police Research & Development	Detection of Child Predators/Cyber Harassers on Social Media	Software	RK307	Security & Surveillance
103	Bureau of Police Research & Development	Criminal/Suspect Profile Generator using OSINT Techniques:	Software	RK310	Security & Surveillance
104	Bureau of Police Research & Development	Proxy & VPN Detector	Software	RK311	Security & Surveillance
105	Govt. of Madhya Pradesh	Face, expression and gesture recognition and compilation in database software	Software	MS331	Security & Surveillance
106	Govt. of Madhya Pradesh	Textile (clothes) recognition and compilation in database software	Software	MS332	Security & Surveillance
107	Govt. of Madhya Pradesh	Baggage and other accessories recognition and compilation in database software	Software	MS334	Security & Surveillance
108	Govt. of Madhya Pradesh	Identification of suspects based on their gestures, gait, BMI (Body Mass Index) and motions or objectionable/ illegal/ improper behavior and gesture of the police (Datasets will be provided on request)	Software	MS335	Security & Surveillance

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109	Ministry of Power	Integrated Automatic Flood Warning and alert system using IOT	Software	PK367	Security & Surveillance
110	Indian Space Research Organisation (ISRO)	Drone route planning	Software	NM383	Security & Surveillance
111	Ministry of Housing and Urban Affairs	Our cities are expanding and most of the people have to travel more than 2 hours daily to commute between their place of work and stay. How can we reduce this time?	Software	BC71	Smart Cities
112	Ministry of Housing and Urban Affairs	Disasters act as a shock to density. Cities of tomorrow What should be done?	Software	BC78	Smart Cities
113	Gov of Uttarakhand	Smart intelligent traffic accidents monitoring systems	Software	MK104	Smart Cities
114	Dr. B R Ambedkar Institute of Technology	Incentivized Tech Bin	Software	DS170	Smart Cities
115	Department of Science and Technology	Unusual event detection from surveillance video shots	Software	PR430	Smart Cities
116	CDK Global	Better and faster emergency care during accidents and vehicle impact.	Software	RA25	Smart Communication

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117	FIS Global	Jarvis (software robot assistant) for corporations	Software	SM446	Smart Communication
118	Bureau of Police Research & Development	LEA & Judiciary Interactive Case Management System	Software	RK61	Smart Communication
119	Department of Atomic Energy	Network routing protocol for infrastructure less gateway devices in man-made	Software	PC87	Smart Communication
120	Ministry of Petroleum and Natural Gas	Technological advances for Retail Outlets	Software	AJ129	Smart Communication
121	Dte of IT & Cyber Security, DRDO	Timing error estimation and matched filtering are crucial processing blocks in a communication receiver. The problem is like looking for the occurrence of a known signal in the observed/measured signal, which is noisy and distorted. This nature of problem makes it best suited for intelligent approach, as human brain invariably solves this kind of problem in day-to-day life. Classical techniques like maximum likelihood, Early-Late, Gardner and Muller approaches have been successfully implemented. However, it is perceived that machine learning techniques will outperform the classical approaches and this fact needs to be researched. The neural network shall use minimum computation and converge fast for practical and real-time implementation. If the results are promising, it can be applied for military and commercial radars.	Software	CK132	Smart Communication
122	Government of Andhra Pradesh	solutions required to solve the challenges faced by Law Investigating Officers (LEOs) in Cyber Crimes:	Software	KB186	Smart Communication

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123	Government of Andhra Pradesh	Disease Reporting System	Software	KB198	Smart Communication
124	Ministry of Power	Development of IoT based advance Public Address and Flood Warning Systems across all Hydro Power project areas.	Software	LN379	Smart Communication
125	Great Learning	Attention Span Detection in Online Instructor Led Sessions	Software	GL32	Smart Education
126	Gov of Uttarakhand	Predicting the trends of quality-oriented jobs	Software	MK105	Smart Education
127	Gov of Uttarakhand	Developing a scientific carrier counselling software	Software	MK106	Smart Education
128	Dr. B R Ambedkar Institute of Technology	Library software for Andaman College	Software	DS165	Smart Education
129	Govt of Puducherry	Domain specific Learner facilitator Assist Software Given a learning resource the application should assist the learner in preparing for exams. For the facilitator the teaching material should be prepared automatically. The learning resource could be electronic materials on a particular subject.	Software	DK181	Smart Education
130	Govt of Puducherry	"Bibliophile Companion - A companion similar to an active agent, that helps the reader to organize and retrieve the highlighted text, book marked page and credentials of the content source in cloud across heterogeneous platforms, gadgets and applications. "	Software	DK182	Smart Education

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131	National Jute Board, Min of Textiles	Tracking the jute sacking bags production/procurement across the value chain	Software	AR250	Smart Textiles
132	CDK Global	Vehicle Maintenance Index- In Today's world with so many cars, models in the market, it is hard to find out which car has a high maintenance cost/index that is authentic source.	Software	RA24	Smart Vehicles
133	Autodesk	Ultra Compact Personalized Flying Vehicle	Software	BN147	Smart Vehicles
134	BEML Limited	Design of Energy Efficient Regenerative Hydraulic System for 100 Ton Excavator	Software	AK210	Smart Vehicles
135	BEML Limited	BH60M and BH100 with Electronic Transmission	Software	AK211	Smart Vehicles
136	ARAI	Warning System for Driver	Software	UK149	Smart Vehicles
137	ARAI	Anti Theft Systems for 2 wheelers	Software	UK151	Smart Vehicles
138	Ministry of Power	Solution For Predictive Maintenance and Battery Life saver for Electric Vehicles	Software	PK368	Smart Vehicles

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139	Cisco DEVNET	Mid-Day Meal Analytics	Software	AM291	Software - Mobile App development
140	Airports Authority of india	An Mobile based Inventory Management System using QR code application	Software	AK12	Software - Mobile App development
141	Airports Authority of india	An Mobile based Dwell time Management System using IOT.	Software	AK14	Software - Mobile App development
142	Airports Authority of india	Mobile Application based Passenger facilitation System using Artificial Intelligence and Machine learning	Software	AK16	Software - Mobile App development
143	Department of Financial Services	Upgradation of Jan-Dhan Darshak App	Software	MK21	Software - Mobile App development
144	Department of Financial Services	Development of Information App for Alert on Financial Matters	Software	MK23	Software - Mobile App development
145	Ministry of Housing and Urban Affairs	Every part of our country is very rich in its heritage and culture. However, awareness about the same can be increased in the local residents. What needs to be done to increase the ownership amongst the citizens towards the heritage (both tangible and intangible)?	Software	BC76	Software - Mobile App development
146	Govt of Goa	Pothole Challenge	Software	DR112	Software - Mobile App development

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147	Govt of Goa	Stray Cattle Challenge	Software	DR113	Software - Mobile App development
148	Ministry of Women and Child Development	Positive psychology games (Mobile/Computer) which help develop a. Respect for right and dignity of women and child b. which help promote objective of Beti Bachao Beti Pado(BBBP)	Software	AS118	Software - Mobile App development
149	Ministry of Women and Child Development	Innovative apps for women safety specially in cyber space	Software	AS123	Software - Mobile App development
150	National Mission for Clean Ganga, DoWR, RD & GR, Ministry of Jal	Know your Ghats mobile app facilitating general public use information on Ghats/crematoria existing along Ganga and its tributaries.	Software	PG179	Software - Mobile App development
151	Government of Andhra Pradesh	Design of GPS enabled online Academic monitoring system to track the classroom transaction and to provide feedback and the review to the teachers to improve their pedagogical practices by the monitoring authorities.	Software	KB185	Software - Mobile App development
152	All India Institute of Ayurveda - Ministry of AYUSH	App for online OPD appointment & Hospital Information System	Software	DA192	Software - Mobile App development
153	Ministry of Rural Development	Non network intensive record keeping system for SHG	Software	MK206	Software - Mobile App development
154	NATIONAL CRIME RECORDS BUREAU	Mobile Apps for Citizens and Police for management of crime records	Software	SK215	Software - Mobile App development

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155	Ministry of Communications	Detecting Poor Telecom Connectivity (Cellular) regions using user device signal strength	Software	PJ234	Software - Mobile App development
156	Ministry of Communications	Mapping of Telecom infrastructure in GIS application	Software	PJ235	Software - Mobile App development
157	Ministry of Communications	To develop an app and SMS based application which can register the grey market complaint	Software	PJ239	Software - Mobile App development
158	Ministry of Communications	Development of platform for dialing single emergency no SDC (Short digit code)	Software	PJ240	Software - Mobile App development
159	Govt.of Sikkim	SINGLE WINDOW MONITORING OF ALL RURAL DEVELOPMENT WELFARE SCHEMES	Software	SG295	Software - Mobile App development
160	Bureau of Police Research & Development	Real-Time Based Facial Recognition Systems	Software	RK308	Software - Mobile App development
161	Govt. of Madhya Pradesh	Web, portal and Apps for facilitating reporting of offences for registration of FIR with provision OCR based signature along with Aadhar based digital signature	Software	MS339	Software - Mobile App development
162	Govt. of Madhya Pradesh	App based portrait building system	Software	MS342	Software - Mobile App development

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163	Indian Space Research Organisation (ISRO)	Air/Water turbidity estimation mobile app	Software	NM370	Software - Mobile App development
164	Indian Space Research Organisation (ISRO)	Web-map data visualization using augmented reality globe	Software	NM377	Software - Mobile App development
165	Indian Space Research Organisation (ISRO)	AI based crop identification mobile app	Software	NM378	Software - Mobile App development
166	Indian Space Research Organisation (ISRO)	App for recording and playing geo tagged videos	Software	NM380	Software - Mobile App development
167	Indian Space Research Organisation (ISRO)	App for identification of sky regions in a photo	Software	NM381	Software - Mobile App development
168	Indian Space Research Organisation (ISRO)	Virtual reality based Earth/Moon explorer	Software	NM385	Software - Mobile App development
169	Indian Space Research Organisation (ISRO)	Processing, visualization and application development of raw GNSS data on Android Smartphones:	Software	NM405	Software - Mobile App development
170	BEML Limited	Creating Ability to Server Logs Management for Analysis & Report of Heterogeneous Servers	Software	AK209	Software - Web App development

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171	Adani Port and SEZ Ltd	To Predict the Optimum Vessel Turnaround Time	Software	SM320	Software - Web App development
172	Adani Port and SEZ Ltd	Seamless Invoicing and Reconciliation System	Software	SM321	Software - Web App development
173	VMware Software India Pvt.Ltd.	Electric Vehicle (EV) Ecosystem	Software	SS443	Software - Web App development

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174	Ministry of Youth Affairs & Sports	NYKS requires a software / Mobile through which we may take attendance of the Officers who are working in the different districts and States across the country.	Software	DK1	Software - Web App development
175	Airports Authority of india	Developing a Software Tool to aid Search and Rescue by Calculating and Plotting Search Area from the Last Known Position of a Missing Aircraft.	Software	AK9	Software - Web App development
176	Airports Authority of india	Rating an Airport Mapping Database	Software	AK10	Software - Web App development
177	Airports Authority of india	A web based software is sought for fail-free operations of various CNS/ATM facilities, preventive maintenance is carried out on daily, weekly, monthly, six-monthly and annual basis.	Software	AK11	Software - Web App development
178	Airports Authority of india	A visual Dashboard based on data analytics for percentage utilization of Airport facilities and utilities using IOT.	Software	AK13	Software - Web App development
179	Airports Authority of india	Knowledge Management System through Block Chain	Software	AK15	Software - Web App development
180	Ministry of Women and Child Development	Management Information System (MIS) software for IMOs	Software	AS33	Software - Web App development

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181	Ministry of Women and Child Development	In GeM Portal, provision for customization of terms and conditions for Annual Maintenance Contract of services as per the need of the services required by the organisation may be created.	Software	AS39	Software - Web App development
182	Bureau of Police Research & Development	Efficient Chatbot Designing	Software	RK62	Software - Web App development
183	Ministry of Housing and Urban Affairs	Cities have issues of safety. There is data available in cities, which indicate a particular section being more unsafe than others. What should be done with these unsafe parts of any city to increase the safety of our citizens?	Software	BC74	Software - Web App development
184	Gov of Uttarakhand	National Web Portal used for designing Job oriented courses with the help of Human Resource data and desirable skill sets from industries.	Software	MK95	Software - Web App development
185	Govt of Goa	Alumni Tracking System	Software	DR111	Software - Web App development
186	Ministry of Women and Child Development	Disruptive innovation for women empowerment	Software	AS119	Software - Web App development
187	Ministry of Women and Child Development	Innovative online tool for protection of Child Right	Software	AS121	Software - Web App development

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S.No	Organization	Problem Statement	Category	PS Number	Technology Bucket
188	Ministry of Women and Child Development	Innovative online tools for comprehensive financial inclusion of women	Software	AS122	Software - Web App development
189	Ministry of Women and Child Development	Promoting holistic nutrition among women and children through/with the help of IT for Poshan Abhiyaan	Software	AS124	Software - Web App development
190	Dte of IT & Cyber Security, DRDO	Indoor Navigation App	Software	CK139	Software - Web App development
191	Government of Andhra Pradesh	Design State Research Portal, a single point securely hosted solution to seamlessly integrate search and manage all the research activities	Software	KB141	Software - Web App development
192	Government of Andhra Pradesh	AI and OCR - To search Telugu & Urdu words in PDF present in Unicode as well as in image format	Software	KB145	Software - Web App development
193	Dr. B R Ambedkar Institute of Technology	Court Case Management software	Software	DS159	Software - Web App development
194	Dr. B R Ambedkar Institute of Technology	Computerized fee collection and Transfer Certificate Module	Software	DS168	Software - Web App development

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S.No	Organization	Problem Statement	Category	PS Number	Technology Bucket
195	Ministry of Rural Development	Automation mechanism for image capturing, processing, standardization, evaluation, classification leading to better decision making results for various programs	Software	MK200	Software - Web App development
196	Ministry of Rural Development	Streamlining of Reporting Framework for MGNREGA reports	Software	MK202	Software - Web App development
197	Ministry of Rural Development	Intelligent attendance solution for MGNREGA workers	Software	MK203	Software - Web App development
198	Ministry of Rural Development	Geography based analysis for noise identification in large and complex data gathered	Software	MK204	Software - Web App development
199	Ministry of Rural Development	Making websites meaningful for differently Abled citizens with open source tools	Software	MK205	Software - Web App development
200	Ministry of Rural Development	Mechanism for linking of works under convergence in Rurban with multiple DBs (e.g.: MGNREGS, PMUY, DDU-GKY, PMAY, SAGY etc.)	Software	MK208	Software - Web App development
201	Government of Andhra Pradesh	Monitoring and Evaluation of Higher Educational Institutions in Andhra Pradesh	Software	KB219	Software - Web App development
202	Government of Andhra Pradesh	Develop a Students Grievance Support System.	Software	KB220	Software - Web App development

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S.No	Organization	Problem Statement	Category	PS Number	Technology Bucket
203	Government of Andhra Pradesh	Design a single point securely hosted solution to seamlessly integrate disbursement of funds and related communication from both the Center and State w.r.t. Central Schemes for each of the Department	Software	KB222	Software - Web App development
204	National Jute Board, Min of Textiles	Automated Inspection of manufacturing Process	Software	AR244	Software - Web App development
205	National Jute Board, Min of Textiles	Software to track the goods through its delivery path and ensure safe delivery	Software	AR245	Software - Web App development
206	National Jute Board, Min of Textiles	Solution For Implementing and tracking of certified jute seeds packaging from the suppliers to jute farmers in india.	Software	AR247	Software - Web App development
207	National Jute Board, Min of Textiles	Assessment of income generation of the jute farmers, jute mills workers in the jute sector through web portal	Software	AR253	Software - Web App development
208	National Jute Board, Min of Textiles	Artificial Intelligence based solution which may calculate the probability of future market trend on the basis of past years data and suggest a suitable pricing model for sale of cotton	Software	AR256	Software - Web App development
209	Ministry of Tribal Affairs	E -Marketplace (Like Amazon, flipkart) wherein tribals can promote, market and sell tribal produce such as handicrafts, arts, paintings, minor forest products etc. on line with provision of delivery and e-payment and promotional discounts.	Software	DN260	Software - Web App development
210	Department of Information Technology and Bio Technology,	Development of online platform for mentoring Startups	Software	SR272	Software - Web App development

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S.No	Organization	Problem Statement	Category	PS Number	Technology Bucket
211	Govt.of Sikkim	Transparency and Safeguard measures in HR management	Software	SG296	Software - Web App development
212	Govt.of Sikkim	Centralised Attendance Monitoring System of Employees of RMDD	Software	SG297	Software - Web App development
213	Bureau of Police Research & Development	CDR/IPDR Data Visualizer	Software	RK312	Software - Web App development
214	Govt. of Madhya Pradesh	Vehicle recognition and compilation in database software	Software	MS333	Software - Web App development
215	Govt. of Madhya Pradesh	Developing Virtual Police Station to receive FIR with OCR based digital signature authenticated through digital signature (Aadhar Number based authentication).	Software	MS336	Software - Web App development
216	Govt. of Madhya Pradesh	Converting typed or printed document images (photos) to legible text documents and storing the critical information in a database and protecting the digital image with # value so that document is admissible as evidence.	Software	MS337	Software - Web App development
217	Govt. of Madhya Pradesh	Converting hand written documents as scanned images or photos (in any format) to legible text document using AI extracting important and critical information into database.	Software	MS338	Software - Web App development
218	Govt. of Madhya Pradesh	Requisitioning of data, information and documents	Software	MS340	Software - Web App development

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219	Education department Gujarat	Road maintenance record-keeping system	Software	AD358	Software - Web App development
220	Ministry of Power	Auto fetching of regulatory compliance data of power sector stake holders for analysing and reporting purpose	Software	LN384	Software - Web App development
221	Indian Space Research Organisation (ISRO)	Web based volume rendering and 3D/4D visualization of Model Forecast	Software	NM389	Software - Web App development
222	Govt.of Sikkim	Data Storage and analytics with Dashboard	Software	SG434	Software - Web App development
223	Govt.of Sikkim	Online STET (State Teacher Eligibility Test) Software or web portal.	Software	SG436	Software - Web App development
224	Bharat Electronics Limited , Bengaluru	Sentiment Analysis of Code-Mixed Languages	Software	MU455	Software - Web App development
225	Ministry of Women and Child Development	Rain harvesting facility may be made compulsory in all the Govt./Govt. funded buildings. Funds for this purpose may be made allocated/released	Software	AS38	Sustainable Environment
226	Dr. B R Ambedkar Institute of Technology	Android App for Geo-tagging location of wildlife and forest offence and sighting of wildlife in the forest areas	Software	DS163	Sustainable Environment

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S.No	Organization	Problem Statement	Category	PS Number	Technology Bucket
227	Dr. B R Ambedkar Institute of Technology	Paperless Office	Software	DS171	Sustainable Environment
228	Government of Andhra Pradesh	APPCB looks forward to bringing in all polluting industries in the state to enhance the existing system more transparent and effective monitoring of emissions and effluents. APPCB envisages implementing Internet of Things (IoT) technology for obtaining of authentic and reliable data directly from the analyzers installed at the industry rather than the data from the intermediary system.	Software	KB189	Sustainable Environment
229	Education department Gujarat	GIS BASED FLOOD RISK ASSESSMENT	Software	AD357	Sustainable Environment
230	Indian Space Research Organisation (ISRO)	Automated mapping of trees/farms in satellite image	Software	NM371	Sustainable Environment
231	Indian Space Research Organisation (ISRO)	Automated land use classification using AI/ML	Software	NM386	Sustainable Environment
232	Indian Space Research Organisation (ISRO)	Air pollution hot spots detection and identifying the source trajectories using ML/AI techniques	Software	NM394	Sustainable Environment
233	Indian Space Research Organisation (ISRO)	Identify shifting cultivation locations in dense temporal stacks	Software	NM395	Sustainable Environment

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S.No	Organization	Problem Statement	Category	PS Number	Technology Bucket
234	Indian Space Research Organisation (ISRO)	Change detection and extraction of information / features of interest in RS images using time series information	Software	NM398	Sustainable Environment
235	Cisco DEVNET	Atithi Devo Bhava	Software	AM289	Travel and Tourism
236	Amazon Web Services	Tourism simplified through voice	Software	AN317	Travel and Tourism
237	Dr. B R Ambedkar Institute of Technology	A Mobile App with Virtual Reality Based Gallery for Heritage Museums of Andaman & Nicobar Islands	Software	DS90	Travel and Tourism
238	Gov of Uttarakhand	Theoretically the bridges are designed having life span of 50 years. However practically the life span of bridges varies between 30 to 40 years. Therefore, it is required to redesign the bridges of length 50m based on geomorphic condition. The solution must be of low cost and longer duration one.	Software	MK103	Travel and Tourism

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S.No	Organization	Problem Statement	Category	PS Number	Technology Bucket
239	Govt of Goa	Virtual Tourist Guide	Software	DR135	Travel and Tourism
240	Ministry of Railways	AI Based Reservation System	Software	BB228	Travel and Tourism
241	CDK Global	Geo Tracking of Waste and Triggering Alerts and Mapping Areas with High Waste Index	Software	RA26	Waste Management
242	Amazon Web Services	AgriTech: Stubble aggregation and disposal	Software	AN316	Waste Management
243	Department of Scientific and Industrial Research	Smart Management of Food Storage and Waste Reduction	Software	AG50	Waste Management
244	Ministry of Micro, Small & Medium Enterprises	Development of business models for collection and utilization of single use plastics and various other industrial wastes	Software	SG64	Waste Management
	Note	Apart From the above Problem Statements all Technology Bucket Are the category of Student Innovation			

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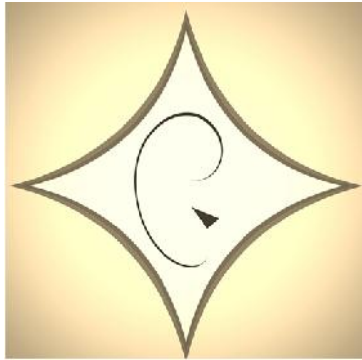
S.No	Organization	Problem Statement	Category	PS Number	Technology Bucket
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