

**Chandigarh Engineering College-CGC
Landran, Mohali, Punjab**

Department of Information Technology
Combined Summary Innovative Projects
Category: Startups, Patent, Competition/Excellent Projects

S. No.	Name of Project	Guide	Year of Project Completion	Type of Project	Roll no.	Name	Department	Research Area	Skill Developed	Uniqueness	Outcome
1	Fiddle	Mr. Amitabh Sharma	2022-2023	Startup	2102197 2102214 2102198 2102213	Md. Aman Ansari Piyush Ranjan Md. Jasim Ansari Pawan Kumar	IT	Application Specific	MongoDB, ReactJS	1. Removes gap between professionals and skilled artist 2. Guidance 3. Free Learning sessions	Startup as Fiddel Pitch Deck
2	Make 360	Dr. Sushil Kamboj	2022-2023	Startup	2102118	Anish Kumar	IT	Application Specific	Web Applications, Graphics, IT Solutions and Software requirements	1. Cost effective 2. Automated tools 3 Trust point 4. Strong Marketing Channels 5. Transparency and Speed	Startup as Make360
3	KieKie Pvt. LTD	Dr. Sushil Kamboj	2020-2021	Startup	2003368 2003361	Shubh Sarpal Ravinder Bishnoi	IT	Research & Innovation	Innovation and Patent Filing	Provides automotative solutions Scalable solutions Cost efficient Developed products include: Vehicle Horn Control Assembly Automatic Stand System	1. Startup as Kie Kie Pvt. Ltd. 2. Two patents Filed, (a)Vehicle Horn Control Assembly (Showcased on Science Day and Parivartan 2022) (b) Automatic Stand System 3.Received grants of Rs. 1 crore by Atal Innovation Mission. 4.Start-up Punjab Seed fund (INR 3Lakhs), 5. In Quest of SDGs: Rs. 50,000/-
4	Automatic Pill Dispenser using Face Gestures	Shanky Goyal, Muskan	2022-2023	Patent	2003353, 2102501	Naman sharma, Manish Aggarwal	IT	Application Specific	Java Application Development	1. Removing direct contact with customer. 2. Easier and faster 3. On the go service 4. Service depends on Face gestures	One Patent Published
5	Automated Medicine Delivery System	Pardeep Singh Tiwana, Astha Gupta, Neeraj Sharma, Sushil Kamboj, Sharanjit Kaur, Astha	26/06/21	Patent	1903296	Shubham	IT	Application Specific	Medicine Dispensing Module	The present invention relates to an automated medicine delivery system comprising, multiple medicine dispensing modules 1 for storing medicines and medical consumables 2, a health monitoring unit 3 attached to each of modules to detect health condition of user(s) present in proximity to medicine dispensing modules and based upon derived conditions module.	Patent Filed on 6/26/2021 Application No. 2022111013589
6	VEHICLE THEFT PREVENTION SYSTEM	Amitabh Sharma	19/01/22	Patent	1902602, 1902634	Antriksh Mahajan, Japleen Kaur Khorana	IT	Application Specific	Biometrics, sensors	-stores biometric information of the owner along with other authenticated users. - processing module notifies the user by receiving and sending notifications towards the computing unit by using the communication module that enables the owner to provide vehicle access after a first, second or third mode of verification is executed as per the processing of the processing module in order to prevent the risk of vehicle theft.	Patent Filed on 1/19/2022 Application no. 202211003150
7	ANTI-THEFT TRACKING DEVICE	Pardeep Singh Tiwana, Astha Gupta, Sushil Kamboj, Amitabh Sharma,	19/01/22	Patent	1902602, 1902665, 1902634	Antriksh Mahajan, Nikhil Bhatia, Japleen Kaur Khorana	IT	Application Specific	Biometrics, sensors	- anti theft prevention system having a computing unit handled by the owner -to identify the user as permanent, temporary or non-registered user, processing module notifies the user by receiving and sending notifications	Patent Filed on 1/19/2022 Application no.202211003139
8	Engine Operated Vehicle Speed Controller	Dr. Shanky, Sachin Majithia	2020-2021	Patent	2003353, 2002900, 2002894, 2102501, 2002801	Naman Sharma Shruti Anand Sankalp Sharma Manish Aggarwal Aanand Berwal	IT	Application Specific	GPS and ECU	-An automated speed control system comprises of a GPS (global positioning system) module integrated with a microcontroller for determining real-time location of a vehicle and road condition over which vehicle 5 is travelling through an ECU (electronic control unit) of vehicle, a memory storage unit for continuously recording data about road conditions acquired by GPS module. -As per input from one of GPS module, imaging unit and memory storage unit to regulate the speed of vehicle in accordance with condition of road to prevent potential road accidents.	Patent Filed on 14/12/2021 Application No. 202211010679
9	QR Based Secure Contactless Banking at ATM's	Anupam Bomkra Shanky Goyal	2020-2021	Patent	2003353, 2002900, 2002894, 2003326, 2002850	Naman Sharma Shruti Anand Sankalp Sharma Arpit Mehndiratta Hritik Bhatt	IT	Application Specific	Image detection	The present invention relates to a contactless ATM access system. When the user scans the QR code and allowing the user to complete contactless transaction with help of numeric keypad and transactional related options available on the computing unit	Patent Filed on 13/12/2021 Application No. 202211010677
10	Waste Wind Energy	MANDEEP DEVGAN	2021-2022	Patent	2003353, 2002900, 2002894, 2102501, 2003364	NAMAN SHARMA SHRUTI ANAND SANKALP SHARMA MANISH AGARWAL SANKIT SHARMA ANURAG MEHTA	IT	Application Specific	Design and development	Design developed for using wind wind energy	Patent filed on 17/11/2022 Application No. 202211010678
11	Fire Extinguisher Drone Using Heat Sensor	Dr. Shanky Goyal	2021-2022	Patent	2003353, 2002900, 2002894, 2102501, 2002859, 2002873, 2002910	NAMAN SHARMA SHRUTI ANAND SANKALP SHARMA MANISH AGARWAL MANSI SHELLEY PREETI YADAV TARANJEET KOUR	IT	Application Specific	Drone technology	An unmanned aerial vehicle (UAV) based fire extinguishing system, comprising GSM module and eliminates the need of hovering just above the fire breakout location and thus prevents the vehicle from catching up fire	Patent filed on 14/11/2022 Application No. 202211010680
12	AUTOMATIC RAILWAY CROSSING BARRIER SYSTEM AND A METHOD THEREOF	NA	2018-2019	Patent	1602999	Manish Dubey	IT	Application Specific	microcontroller, sensor technology	-The system detects the arrival and the departure of train for the barrier operation using vibration sensor, laser sensor and microcontroller. -The microcontroller activates the buzzer which sends signal to hydraulic poles for 15 opening and closing the barrier.	Patent Filed on 17.08.2018 APPLICATION NO. 201811041296
13	PORTABLE FERTILIZER DISPENSING TOOL	Dr. Mohit Srivastava, Dr. Shashi Bhushan	2018-2019	Patent	1703211, 1503402	Abhishek, Himanshu, Abhinandan, Archit, Minal Parmar, Manisha Rana, Rakshita	IT	Application Specific	Design and development	The present invention relates to a fertilizer dispensing tool for spreading dry fertilizers on a crop field. The tool designed for distributing the fertilizer; and a solar panel and a battery attached to the container for providing power to the tool.	Patent Granted No. -43185,APPLICATION NO. 201811011163

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14	AUDIO VIRTUALIZING DEVICE	Pardeep Singh Tiwana	2019-2020	Patent	1902589	Abhijeet Kumar	IT	Application Specific	Design and development	Design on audio virtualizing device	Patent Filed Date: 2019/12/22 Application No. 202011005783
15	DATA TRANSMISSION METHOD FOR HUB-BASED NETWORKING SYSTEM	Dr. Amanpreet Kaur, Dr. Parminder Singh, Ms. Harpreet Kaur Toor, Mr. Mandeep Devgan	2019-2020	Patent	1703340	Pramank Bali	IT	Application Specific	Networks	Designed method for DATA TRANSMISSION METHOD FOR HUB-BASED NETWORKING SYSTEM	Patent Filed Date: 8/1/2020 Application No. 202011033096
16	DEVICE FOR DIAGNOSING HEALTH PARAMETERS	Dr. Shashi Bhushan, Pardeep Singh, Aasha Gupta, Sharanjit Kaur	2019-2020	Patent	1902634	Japleen Kaur	IT	Application Specific	diagnostic system	The device will monitor the various health parameters	Patent Filed Date: 3/12/2020 Application No. 202011010726
17	VEHICLE OVERTAKING SYSTEM	Surinder Singh	2019-2020	Patent	1802569	Gaurav Kumar	IT	Application Specific	Design and development	System is designed for safe vehicle overtaking.	Patent Filed Date: 3/12/2020 Application No. 202011010726
18	Automobile Headlight Regulation Device	Dr. Sushil Kamboj, Dr. Shanky Goyal, Shalini Sharma	2022-2023	Patent	2003353, 2002900, 2102501	Naman Sharma, Shruti Anand, Manish Agarwal	IT	Application Specific	Design and development	Designed device for automobile headlight.	Patent Filed on: 30/12/2022 Application No. 202211077322
19	READING AND WRITING DEVICE FOR SENSORY IMPAIRED PERSON	Dr. Shanky Goyal	2022-2023	Patent	2003353, 2002900, 2102501	Naman Sharma, Shruti Anand, Manish Agarwal, Anurag Mehta,	IT	Application Specific	Design and development	Device will be helpful for the sensory impaired persons who cannot read and write.	Patent Filed on 09-08-2022 Application No. 202211045353
20	SECURED PASSENGER CONVEYING SYSTEM	Dr. Amanpreet Kaur	2022-2023	Patent	2003353, 2002900, 2002894, 2003326	Naman Sharma, Shruti Anand, Sankalp Sharma, Arpit Mehndiratta, Amrik Singh, Neetika Gupta	IT	Application Specific	Design and development	Design the secured passenger conveying system	Patent Filed on 09-08-2022 Application No. 202211045352
21	Generation of electricity by means of mechanical energy	Dr. Shanky Goyal, Mrs. Harpreet Kaur Toor	2022-2023	Patent	2002842, 2002921, 2003361, 2003368	Gaurav Ruhil, Yash Trivedi, Ravinder Bishnoi	IT	Application Specific	Design and development	The idea for electricity generation is give by means of mechanical energy.	Patent Filed on: 4/18/2023, PIE1310
22	IoT-Based Medical Emergency Assistive System For Four-Wheelers	Dr. Shanky Goyal	2022-2023	Patent	2002900, 2002916	Shruti Anand, Aditi Dutta, Tarun Goyal, Vansh Chuchra	IT	Application Specific	Design and development	The emergency assistive system is designed for four wheelers based on IoT-based.	Patent filed on: 6/5/2023 Application No.: 202311038653
23	Modular Examination Management System	Pardeep Singh Tiwana, Anupam Bontra Virk and Dr. Shanky Goyal	2022-2023	Patent	2003353, 2002900, 2002819	Naman Sharma, Shruti Anand, Anika	IT	Application Specific	Design and development	Design is given for managing the examination system	Patent filed on: 6/5/2023 Application No.: 202311038620
24	UN-COPY	Dr. Shanky Goyal	2021-2022 (Copyright)	Copyright	2002900, 2003353, 2002894	Shruti Anand, Naman Sharma, Sankalp Sharma	IT	Application Specific	PYTHON, HTML5, CSS3, JAVASCRIPT	1. Converts word file to PDF 2. Uncopiable PDF 3. Secure 4. Lower resolution 5. Lesser time consumption	Copyright
25	Aawaaz	Dr. Shashi Bhushan	2017-2018	Excellent Project	1239876 1239904	Ishant Raju, Nishant Raju	IT	Application Specific	Speech generation	1. Desktop application 2. Aims in employability of dumb people 3. User-friendly 4. Speech Generating Tool 5. Ease in communication 6. Not Available prior	Filed 2 patents. One already published
26	AGIATOR "A Triple Environment Rescue and Surveillance Manual and Automatic Robot"	Dr. Shashi Bhushan	2019-2020	Excellent Project	1703335	Piyush Chaudhary	IT	Robotics	Using Drone Technology & Sensors	1. Helpful in private sector 2. Can be used for delivery purpose 3. Low cost 4. Powerful 5. Efficient environment	Participation Certificate in Parivartan
27	Third Eye	Dr. Shashi Bhushan	2019-2020	Excellent Project	1603077	Sonali	IT	Sensors and Drone technology	Using Drone Technology & Sensors	1. Saving Time 2. Providing Security 3. Saving soldiers life 4. Helps in disaster search operations	Participation Certificate in Parivartan
28	ADHEEP	Dr. Shashi Bhushan	2018-2019	Excellent Project	1602709	Himani Verma	IT	Internet of Things	Building secure networks	1. Reliability and Confidentiality 2. Provides Authorization, Authentication and Accounting (AAA) 3. Implemented with existing architecture of internet model 4. Fingerprints are unique and impossible to duplicate	Participation Certificate in Parivartan
29	Comprehensive tools to edit the pdf and convert into epub format	Dr. Shanky Goyal	2020-2021	Excellent Project	2003353, 2002900, 2102501, 2002894, 2002906	Naman Sharma, Shruti Anand, Manish Aggarwal, Sankalp sharma, Surbhi Kumari Jha	IT	Application Specific	Python (Different Modules such as Tkinter, Aspose-Words, gTTS, etc.) Mechanism for blind people (prototype made using DC motor, Arduino, batteries, etc.) (Optional)	1. Designed for impaired readers 2. In-Built Screen Reader 3. Fast 4. Free Software 5. Feasible to OCR	Amongst Finalist in Smart Hackathon 2022

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30	"DoCo - The first WhatsApp Document Converter Blog"	Dr. Shanky Goyal	2022-2023	Excellent Project	2003353.	Naman Sharma	IT	Application Specific	Python and JavaScript and utilizes various libraries and frameworks such as Twilio and Flask.	1. Easy to use 2. No additional software required 3. Fast conversion	Copyright
31	TABI - MARKETING AUTOMATION TOOL	Ms. Anupam Bonkra	2022-2023	Excellent Project	2002841	Gaurav	IT	Application Specific	developing and using automation tools	1. A fully automated solution for customize marketing Emails, SMS and push notifications. 2. Easily build customized dynamic Email Templates with zero code. 3. Easily build dynamic SMS and push notification messages. 4. In a few steps create ONE TIME and RECURRING Email, SMS and Push Notification Campaigns. 5. Design and build journey according to requirement with zero code. 6. Test Templates before sending it in the real world. 7. Dynamic user roles for different users.	Participation Certificate in Parivartan 2022
32	Student Management System	Mr. Amitabh Sharma	2021-2022	Excellent Project	1903248	Abhay	IT	Application Specific	Able to develop the management system for student related tasks	Handle information of the student regarding admission and examination	Final Year Project Excellent Project Services: Can be effective for collecting feedback from students, for suggesting the carrier options, and assisting in recruitments
33	Blood Bank Management App	Ms. Swati Rehal	2021-2022	Excellent Project	1902652	Mani Singh	IT	Application Specific	Student is able to develop Android application	1. Daily donor records 2. Blood and requisition/issue 3. Powerful search for donors by blood group, gender, contact	Final Year Project Excellent Project Services: Helpful for the communities like doctors, donors, receivers and other general public.
34	Bug Tracking System	Ms. Swati Rehal	2021-2022	Excellent Project	1902638	Josh Abraham	IT	Application Specific	J2SE	1. Maintains bug history 2. easy maintenance 3. Fully authenticated	Final Year Project Excellent Project Services: Helpful in finding the defects in the software
35	Automatic Car Parking System	Mr. Sachin Majithia	2021-2022	Excellent Project	1902599	Angad Dhiman	IT	Application Specific	Visual Studio with Python and SOLite3	1. Park vehicle in own slot by paying 2. Damage and problem of vehicle is claimed by parking management system 3. Determines parking area full or not 4. Vehicle parked in secure condition	Final Year Project Excellent Project Services: Minimize the task of parking a vehicle by providing extra details of the customer.
36	Woman Safety	Mr. Pardeep Singh Tiwana	2021-2022	Excellent Project	1902589	Abhijeet Kumar	IT	Application Specific	Java and Android application development	1. Fast 2. Alert message sending time should also be very quick	Final Year Project Excellent Project Services: Helpful for the community to connect to nearest help.
37	Content Management System	Mr. Sachin Majithia	2021-2022	Excellent Project	1902590, 1902590	Abhinav Kamboj, Abhishek Pandey	IT	Application Specific	XAMPP	CMS allows publishing, editing, modifying and organizing deleting and maintaining content from central interface.	Final Year Project Excellent Project Services: It can serve as a daily diary. The system helps in communication between the members of the organization.
38	Engrader	Mr. Neeraj Sharma	2021-2022	Excellent Project	1903285	Raghav Garg	IT	Application Specific	Learned android application development	It allows user to create their account and same will be stored in Realtime Database after achieving certain validation step (such as password must contain an uppercase, etc.). - It also uses Email authentication i.e. if one email id is registered then it can not be used by any other account. - Login field for old user to login. - If user want they see their details than can visit profile screen. - User can use any of the given module and attempt the quiz. - For each question there is a timer, user have to attempt the question in that particular time only.	Final Year Project Excellent Project Services: help users to improve their English skills by practicing questions of different modules
39	Movie Recommender System	Dr. Amanpreet Kaur	2021-2022	Excellent Project	1803261	Dhruv Dhir	IT	Web-based Application	Jupyter Notebook, Python	1. Apply machine learning model 2. More recommendations 3. Interactive user experience	Final Year Project Excellent Project Services: Can be useful for people to get better search experience. The recommendation system can be used for almost any domain.
40	TO-DO List	Mr. Amitabh Sharma, Mr. Pardeep Tiwana	2021-2022	Excellent Project	1902696 1902696 1902711	Shivam Sharma Sahil Gupta Vishal Bansal	IT	Application Specific	Java Application Development	1. Add and Delete task 2. Planned Activity 3. Prioritizing Matrix 4. simplicity 5. speed 6. low resources demand	Final Year Project Excellent Project Services: It helps to weed out the unwanted stuff and focus on the things that matter most.

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41	Library Management System	Ms. Priya Dogra	2021-2022	Excellent Project	1903252	Ankit Kumar	IT	Management System	Java Swing, Eclipse	1. User friendly interface 2. Fast access to database 3. Less error 4. More Storage Capacity 5. Search facility 6. Quick transaction	Final Year Project Excellent Project Services: The Library Management System allows the user to store the book details and the person's details. This software allows storing the details of all the data related to library. The implementation of the system will reduce data entry time and provide readily calculated reports.
42	FACE RECOGNITION	Ms. Priya Dogra	2021-2022	Excellent Project	1903266	Devansh Rathore	IT	Application Specific	Machine learning	SVM Classifier based Identify the name of the person	Final Year Project Excellent Project Services: It is able to automatically verify identity information for secure transactions, for surveillance and security tasks, and for access control to buildings etc.
43	TOLL PLAZA SYSTEM	Ms. Shanky Goyal	2019-2020	Excellent Project	1703282	Jagrit Chadha	IT	Application Specific	Java, Microsoft Access	1. optimize the queue length of vehicles 2. time of customers in the system.	Final Year Project Excellent Project Services: The project benefits in savings travel time, travel cost, increase in comfort and convenience.
44	Home Automation System	Mr. Mandeep Singh Devgan	2021-2022	Excellent Project	1802623 1802632	Ritik Sharma Sarvesh Vinayak	IT	Application Specific	IOT	1. Provide multiple features in a single product which incorporates intrusion detection. 2. Operating of appliances based on environmental conditions, incorporating user schedule, detecting users for easier access and saving electric power.	Final Year Project Excellent Project Services: The project can be helpful by building a user interface using API's to take manual commands from users from anywhere.
45	JARVIS	Dr. Amanpreet Kaur	2021-2022	Excellent Project	1803247	Aishwarya Sood	IT	Application Specific	Speech Recognition using python	JARVIS, the Desktop Assistant would send emails without typing a single word, doing Wikipedia searches without opening web browsers and performing many other daily tasks like playing music with the help of a single voice command.	Final Year Project Excellent Project Services: It can be used as Desktop Assistant