

**Discover & Learn 1-2-3-4 projects list
And
IRD Student Startup Action projects list
(Call 2018)**

Discover and Learn 1-2-3-4 Projects (3rd Call year 2018)

S. No. & Project No. in IRIS	Title of Project	Mentors	Students
1 & (MI01852)	UAVs for high altitude and High Wind operations	Prof. Supreet Singh Bagha (Mech. Dept.)	Shiv Teja (Mech.) <u>2015ME10653</u> Jayant Yewale (Text.) <u>2016TT10899</u> Gaurav Agrawal (Mech.) <u>2017M20664</u> Vishnu Teja (Maths.) <u>2018MT10761</u>
2 & (MI01983)	A Machine Learning Tool to suggest career oaths based on multiple psychological, physiological, geographical, financial, social and preferntial factors	Prof. Sourabh B Paul (HUSS) Prof. Sayan Ranu (CSE)	Samyak Jain (DBEB) <u>2015BB10057</u> Akshay Patel (Industrial & Production) <u>2016ME20793</u> Kumar Shubham (DBEB) <u>2016BB10052</u> Rahul jain (Elect. Engg.) <u>2017EE10476</u> Rachit Mittal (Math. & Computing) <u>2018MT10746</u>
3 & (MI01854)	Implementing neural networks in analog hardware on conventional silicon and non conventional flexible platforms for real time machine learning.	Prof. Debanjan Bhowmik (Elect. Dept.)	Utkarsh Saxena (Elect.) <u>2015EE30543</u> Kushagra Goyal (Mech.) <u>2016ME10703</u> Ritvik Sharma (Elec.) <u>2017EE10485</u>

IRD Student Startup Action Projects (3rd Call_year 2018)

S. No. & Project No. in IRIS	Title of Project	Mentors	Students
1 & (MI01856)	Automation in Design and Execution of Construction Projects	Prof. J. Uma Maheswari (Civil Dept.)	Shivam Rana (Civil) <u>2014CE10381</u> Ashvin Bambhaniya (Civil) <u>2015CE10320</u> Venugopal Mahajan (Civil) <u>2018CET2652</u> Suryamani Kumar (Civil) <u>2018CET2187</u> Ashutosh Dubey (Civil) <u>2018CEG2630</u> Prateet Garg (Civil) <u>2016CE10235</u> Suresh Bishnoi (Civil) <u>2016CE10215</u> <u>IITD Alumni</u> Abhishek Arunachalam (Civil) <u>2014CE10851</u> (arunachalamabhishek@gmail.com)
2 & (MI01853)	Production of Sanitary pads and other valuable products from used paper based food containers.	Prof. Ashok Kumar Ganguli (Chemistry Dept.)	Anatara Sarkar (chemistry) <u>2018CYZ8196</u> Priyanka Yadav (chemistry) <u>2018CYZ8210</u> Naseeb Singh (chemistry) <u>2017CYS7030</u> Dr. G.B Kunde (chemistry) <u>ird1269</u>
3 & (MI01871)	AmbiVan - Every Second Matters	Prof. Nezamuddin (Civil Dept.)	Rishi Dayanand (DBEB) <u>2013BB50029</u> Anant Rawatkar (Chemical) <u>2016CH10135</u> Sonu Kumar Gupta (Elect.) <u>2015EE10481</u> <u>IITD Alumni</u> Amar Srivastava (Chemical) <u>2012CH10068</u>
4 & (MI01926)	Effey Autoclaves	Prof. Srinivasan Venkataraman (Design)	Puneet Lagoo (DBEB) <u>2015BB10052</u> Prankur Kataria (Design) <u>2018JDS6009</u>

5 & (MI01872)	We4Sports - Your Personal Sports Assistant Tags : Internet of Things, Augumented Reality, Data Science	Prof. Subodh Sharma (CSE) Prof. Jyoti Kumar (Design)	Priyanka Rai (Design) <u>2018JDS6006</u> Kashish Bansal (CSE) <u>2015CS50285</u>
6 & (MI01861)	Spine-A-Crust	Prof. Bipin Kumar Prof. Wazed Ali (Text. Dept.)	Harsh Lal (Text.) <u>2016TT10915</u> Jayesh Jawandhia (Chemical) <u>2018CH70281</u> Akash Sharma (Phys.) <u>2017PH10847</u> Satendra Kumar (Text.) <u>2016TT10906</u>

**Discover & Learn 1-2-3-4 projects list
(Call 2017)**

Discover & Learn 1-2-3-4 Projects (2nd Call 2017)

S. No. & Project No.	Project Title	Mentor & Co-Mentor Department/Centre	Students Name and Entry No.
1 & (MI01765)	Designing and manufacturing a composite Battery Pack for Lithium ion batteries	Prof. Amit Kumar Jain Prof. M.Veerachary (Co-PI) Elect. Dept.	Abhijeet Saxena (Mech.) <u>2015ME20708</u> Sonu Jaiswal (Elect.) <u>2016EE30522</u> Sahil Singh Malik (Mech.) <u>2015ME10674</u> Sudhanshu Ranjan (Text.) <u>2017TT10966</u>
2 & (MI01780)	Arth- Bringing meaning to the culture	Prof. Anjan Ray Prof. Nomesh Bolia (Co-PI) Mech. Dept.	Harshvardhan Patni (Mathematics) <u>2017MT10730</u> Sankalp Katiyar (Mech.) <u>2015ME20760</u> Faraz Mazhar (Mech.) <u>2016ME10705</u> Chandan Mittal (Mech.) <u>2016ME10692</u> Rishi Raj Singh (Mathematics) <u>2017MT10745</u> Shalaka Patil (DBEB) <u>2017BB10038</u>
3 & (MI01706)	RNA Thermometers: Analysis and Design	Prof. Shaunak Sen Elect. Dept.	Chaitanya V. Bhawe (DBEB) <u>2014BB10033</u> Sumit Kumar (Phys.) <u>2015PH10832</u> Aryan Digwal (Maths & computing) <u>2015MT10591</u> Harman Mehta (DBEB) <u>2016BB50003</u> Sannat Mengi (DBEB) <u>2016BB10030</u> Shreya Johri (DBEB) <u>2016BB10039</u>
4 & (MI01788)	Simulator for methane production from gas hydrate reservoirs by CO2 injection using experimentally derived flow properties	Prof. Jyoti Phirani Chemical Engg.	Paridhi Gupta (Chemical Dept.) <u>2015CH70174</u> Abhishek Kumar Singh (DBEB) <u>2016BB10051</u> Umesh Shahdadpuri (Chemical) <u>2016CH70162</u> Aman Jain (Mech.) <u>2016ME10758</u> Mahak (CSE) <u>2017CS10219</u>
5 & (MI01732)	Autonomous self localising Robots	Prof. I N Kar Prof. Shubhendu Bhasin (Co-PI) Elect. Dept.	Deepak Korku (Elect.) <u>2014EE30505</u> Natasha Meena (Elect.) <u>2015EE10114</u> Prakhar Agrawal (Elect.) <u>2015EE30121</u> Himanshu Singh (Elect.) <u>2015EE10449</u> Avinash Bhutani (Elect.) <u>2016EE10427</u> Harsh Jain (Elect.) <u>2016EE30505</u>

6 & (MI01773)	Safer Helmet Design	Prof. Puneet Mahajan Prof. Sanjeev Sanghi (Co-PI) Applied Mechanics	Vaibhav Gupta (Mathematics & computing) 2014MT10614 Kartik Chaudhary (Industrial Production Engg.) 2015ME20738 Pratham Baheti (Chemical Dept.) 2016CH70163 Aditya Gupta (Chemical Dept.) 2017CH10189
7 & (MI01704)	Design and construction of miRNA- based hybrid sponge as a potential novel agent for glioblastoma treatment	Prof. Ritu Kulshreshtha DBEB	Randheer Kumar (DBEB) 2014BB10050 Sashi Kalan (DBEB) 2015BB50013 Prince Agrawal (DBEB) 2015BB10051 Avlokit Kumar (DBEB) 2016BB10057 Kshitij Sahu_(DBEB) 2017BB50060
8 & (MI01734)	Directed evolution of enzymes via high throughput screening using droplet microfluidics	Prof. Ravikrishnan Elangovan DBEB	Saurabh Parikh (DBEB) 2014BB10056 Vineet Nair (Elect.) 2016JOP2960 Aishvi Jain (DBEB) 2015BB10024 Sonal Arora (DBEB) 2016BB10041 Aman Prasad (Chemical Dept.) 2017CH70274
9 & (MI01687)	Fabrication and characterisation of micro Hall devices based on semiconductor heterostructures and then applying them to measure inhomogeneous magnetic fields	Prof. Pintu Das Phys. Dept.	Shivam Goyal (Phys.) 2015PH10827 Ayush De (Phys.) 2016PH10555 Saurabh Gupta (Phys.) 2016PH10543 Mitali Agrawal (Phys.) 2017PH10830 Sukanya Goshal (Phys.) 2018PH10852
10 & (MI01722)	Accurate measurement of stability, perfection and relaxation in Yoga Asanas using Kinect and EMG and Studying its impact on Cognitive performance.	Prof. Rahul Garg (CSE) Prof. Varsha Singh (Co-PI) HUSS	Prakhar Ganesh (CSE) 2015CS10245 Saransh Verma (CSE) 2016CS10326 Apoorv Jain (EE) 2017EE30654 Hetvi Jethwani (Maths) 2018MT10754

**Discover & Learn 1-2-3-4 projects list
(Call 2016)**

Discover and Learn 1-2-3-4 project details (1st call_year 2016)

S. no. & Project No. in IRIS	Title	Mentor	Students Involved
1 & MI01507	Design and fabrication of heterojunction silicon solar cells	PROF. VAMSI KRISHNA KOMARALA Centre for Energy Studies (CES)	Govind Nanda (Phys. Dept.) <u>Entry No. 2016PH10548</u> Vasu Agarwal (Chemical Dept.) <u>Entry No. 2017CH10260</u> Vidit Jain (CSE) <u>Entry No. 2017CS10389</u>
2 & MI01508	A real time bio-mechanical monitoring system for fall assessment in elderly population	PROF. DEEPAK JOSHI Centre for Biomedical Engineering PROF. B.K PANIGRAHI (Co-PI) Dept. of Electrical Engg.	Moulik Choraria (Elect. Dept.) <u>Entry No. 2015EE30112</u> Sankalp Garg (Elect. Dept.) <u>Entry No. 2016EE10440</u> Utkarsh Tyagi (Elect. Dept.) <u>Entry No. 2017EE30550</u> Arham Raees (Elect. Dept.) <u>Entry No. 2017EE30517</u> Aditya Gupta (Elect. Dept.) <u>Entry No. 2017EE30513</u>

3 & MI01509	Concept tagging model for short text conceptualization	PROF. NILADRI CHATTERJEE Dept. of Mathematics PROF. S. SIVANATHANS (Co-PI) Dept. of Mathematics	Yogesh Gupta (Math. Dept.) <u>Entry No. 2015MT60545</u> Prateek Goyal (Math. Dept.) <u>Entry No. 2016MT10606</u> Utkarsh Gupta (Math. Dept.) <u>Entry No. 2017MT10753</u> Ayush Srivastava (Math. Dept.) <u>Entry No. 2018MT10747</u> Uddharsh Kotahwala (Math. Dept.) <u>Entry No. 2018MT10771</u>
4 & MI01510	To study and develop a Battery Management System (BMS) for Li-Ion cell	PROF. AMIT GUPTA Dept. of Mechanical Engineering	Nikesh Bisht Gupta Entry No. 2012ME10690 Dept. of Mechanical Engineering Shubham Entry No. 2014PH10828 Dept. of Physics Arnav Karan Entry No. 2015BB10029 Dept. of Biochemical Engineering & Biotechnology Mayank Raj Yogi Entry No. 2016TT10897 Dept. of Textile Technology

5 & MI01511	Multimodality Image segmentation & 3D printing for medical imaging	PROF. AMIT MEHNDIRATTA Centre for Biomedical Engineering	Ravi Singh (Elect. Dept.) <u>Entry No. 2016EE10467</u> Nilaksh Agarwal (Phys. Dept.) <u>Entry No. 2015PH10813</u> Satyageet (DBEB) <u>Entry No. 2016BB10053</u> Ankit Kumar (Math. Dept.) <u>Entry No. 2017MT10727</u>
6 & MI01512	Controlling particle size in reactive precipitation in circular coiled flow reactors	PROF. VIKRAM SINGH Dept. of Chemical Engineering	Pratyush Dhasmana (Chemical Dept.) <u>Entry No. 2016CH10097</u> Anuj Aggarwal (Chemical Dept.) <u>Entry No. 2016CH70151</u> Sagar K. Pal (Chemical Dept.) <u>Entry No. 2017CHE2553</u>
7 & MI01513	Development of a mobile application for crowdsourcing geo tagged event data	PROF. SUBRAT KAR Dept. of Electrical Engineering	Mayank Rajoria (CSE) <u>Entry No. 2014CS10233</u> Shubham Rathi (CSE) <u>Entry No. 2014CS10256</u> Prakhar Gupta (CSE) <u>Entry No. 2014CS10290</u> K Isaac Prashanth (EE) <u>Entry No. 2015EE10456</u> Deepak Chaurasia (Math. Dept.) <u>Entry No. 2016MT10631</u>

8 & MI01514	Development of a vibration based diagnostic interface for rotating machinery	PROF. ASHISH KAMALAKAR DARPE Dept. of Mechanical Engineering PROF. SUBRAT KAR (Co-PI) Dept. of Electrical	Anuj Mittal (Elect. Dept.) <u>Entry No. 2014EE10428</u> Aishwary Srivastava (Elect. Dept.) <u>Entry No. 2015EE30507</u> Utkarsh Reniwal (Text. Dept.) <u>Entry No. 2016TT10865</u> Nilabjo Dey (Elect. Dept.) <u>Entry No. 2017EE10465</u> Taransh Sindhwani (Mech. Dept.) <u>Entry No. 2017ME10623</u>
9 & MI01515	Preparing a carbon fibre reinforced polymer chassis for a formula student race care	PROF. JAYANT JAIN Dept. of Applied Mechanics	Vivek Sudhir Mahindrakar (Mech. Dept.) <u>Entry No. 2017ME10628</u> Hardik Goyal (Chemical Dept.) <u>Entry No. 2016CH70169</u> Vineet Kumar Singh (Mech. Dept.) <u>Entry No. 2017ME10626</u> Harsh Vardhan Chandrakar (Physics Dept.) <u>Entry No. 2018PH10809</u>

10 & MI01516	3 Dimensional CFD design of full aero-package for Formula Style Race-car	<p>PROF. S.N. SINGH Dept. of Applied Mechanics PROF. AMIT GUPTA (Co-PI) Dept. of Mechanical Engg.</p>	<p>Gaurav Kumar (Phys. Dept.) <u>Entry No. 2014PH10795</u></p> <p>Prakhar Kumar Mahobia (Mech. Dept.) <u>Entry No. 2015ME10666</u></p> <p>Shubham Satyarthi (Mech. Dept.) <u>Entry No. 2016ME10722</u></p> <p>Samyak Jain (Text. Dept.) <u>Entry No. 2017TT10956</u></p> <p>Sharma Dipanshu Dilip Kumar (Elect. Dept.) <u>Entry No. 2017EE10306</u></p>
11 & MI01517	Control system and instrumentation for a driverless car	<p>PROF. SHUBHENDU BHASIN Dept. of Electrical Engineering</p>	<p>Deepansu Kaushik (Mech.) <u>Entry no. 2016ME0684</u></p> <p>Meenakshi (Text.) <u>Entry No. 2017TT10923</u></p> <p>Abhishek Singh (Mech.) <u>Entry No. 2016ME20806</u></p> <p>Shaivee Malik (DBEB) <u>Entry No. 2017BB10037</u></p>

12 & MI01519	Design and development of an app-controlled acupressure device	PROF. TAPAN KUMAR GANDHI Dept. of Electrical Engineering Prof. Alok Prasad (Ext. Co-ordinator, Irene Hospital)	Shubham Nirbhay (Elect. Dept.) <u>Entry No. 2013EE10496</u> Nikhil Gupta (Elect. Dept.) <u>Entry No. 2014EE10463</u> Rakesh Kumar (Elect. Dep.) <u>Entry No. 2015EE30531</u> Sahil (Chemical Dept.) <u>Entry No. 2016CH10115</u>
13 & MI01522	Reprogrammable autonomous robot (RoboMuse)	PROF. SUBIR KUMAR SAHA Dept. of Mechanical Engineering PROF. KOLIN PAUL (Co-PI) Dept. of Computer Sci. PROF. I. N KAR (Co-PI) Dept. of Electrical	Amal George M (Phys. Dept.) <u>Entry No. 2014PH10784</u> Rohit Patel (Mech. Dept.) <u>Entry No. 2014ME20757</u> Sundarapu H M R Prashanth Kumar (Phys. Dept.) <u>Entry No. 2014PH10832</u> Ayush Jindal (Mech. Dept.) <u>Entry No. 2015ME20726</u> Sumit Singh (Phys. Dept.) <u>Entry No. 2016PH10575</u>