Department of Information Technology
Faculty of Technology
Dharmsinh Desai University, Nadiad

## List of Major Research Projects

| Year of Award | Name of Faculty | Project Title | Duration | Funding Agency | Funding Amount in Rs. |
|---|---|---|---|---|---|
| 2015[++] | Prof. R. S. Chhajed (Co-PI) | Designing a Reflecting Light Microscope for 3D Imaging of Thick and Irregular Surface | 3.5 Years | TSD Programme (DST) | 80,75,000 |
| 2014[**] | Prof. R. S. Chhajed (Co-PI) | Development of Embedded and FPGA Application Modules for space payloads | 3 Years | PLANEX Scheme (PRL) | 38,70,000 |

[++] In Collaboration with R&D Center (DDU), Pharmaceutics Dept. (Faculty of Pharmacy, DDU) and SSCSSN Center (DDU)
[**] In Collaboration with R&D Center (DDU)

## List of Minor Research Projects

| Year of Award | Name of Faculty | Project Title | Duration | Funding Agency | Funding Amount in Rs. |
|---|---|---|---|---|---|
| 2011 | Prof. (Dr.) M. M. Goswami (PI) | Network Device Monitoring and Checking System | 1 Year | IEDC Scheme (DST) | 1,00,000 |
| 2024-25 | Prof. Zankhna V. Dabhi, Prof.Fatema M. Vhora | Crop Production Prediction Based On SoilType | 1 year | Dharmsinh Desai University | 1,00,000 |
| 2024-25 | Prof. Ravindra Vyas | Student Attendance using Voice Authentication in Classroom Environment | 1 year | Dharmsinh Desai University | 75,000 |

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| 2024-25 | Prof. Sunil K. Vithlani, Prof. Sandeep R. Suthar | Empowering Farmers: A Smart Approach to Early Detection and Management of Crop Diseases | 1 year | Dharmsinh Desai University | 1,00,000 |
| 2024-25 | Prof. Archana N. Vyas, Prof. Tanvi M Dhruv | Identification of Humans in case of Natural calamity like flood. | 1 year | Dharmsinh Desai University | 1,00,000 |
| 2024-25 | Prof. Deepak C Vegda | Smoky Vehicle detection in urban area using Machine learning Algorithms | 1 year | Dharmsinh Desai University | 95,000 |

**Abbreviations:**

- DST – Director of Science and Technology
- PRL – Physical Research Laboratory
- TSD – Technology and Systems Development Programme
- PLANEX- Planetary Science and Exploration Programme
- IEDC – Innovation and Entrepreneurship Development Cell

## Consultancy Projects

| Year of Award | Name of Faculty | Project Title | Duration | Funding Agency | Funding Amount in Rs. |
|---|---|---|---|---|---|
| 2022-23 | Prof. (Dr.) V. K. Dabhi, Prof. (Dr.) H. B. Prajapati, Prof. (Dr.) M. M. Goswami | AI based solution to Stowage Problem for Shipping Industry | 6 Months | Ridgeant Technologies | 3,00,000 |
| 2024-25 | Prof. (Dr.) V. K. Dabhi, Prof. (Dr.) H. B. Prajapati | Rice Grain Analysis | 2 Months | Holbox AI | 50,000 |
| 2024-25 | Prof. (Dr.) V. K. Dabhi, Prof. (Dr.) H. B. Prajapati | AI for Cancer Detection | 2 Months | Holbox AI | 50,000 |

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|---|---|---|---|---|---|
| 2025-26 | Prof. (Dr.) H. B. Prajapati, Prof. (Dr.) V. K. Dabhi | ML for Industrial Data | 4 Months | Atyan Tech | 1,00,000 |

## Students Projects

| Year of Award | Name of Faculty (Mentor) | Project Title | Duration | Funding Agency | Funding Amount in Rs. |
|---|---|---|---|---|---|
| 2021 | Prof. Sunil K Vithlani | Automated Attendance System using Image Processing | 1 Year | SSIP, Govt of Gujarat | 33,850 |
| 2021 | Prof. Sandeep Suthar | Smart Dustbin | 1 Year | SSIP, Govt of Gujarat | 22,000 |
| 2021 | Prof. Sunil K Vithlani | Newborn Baby Monitoring System | 1 Year | SSIP, Govt of Gujarat | 25,000 |
| 2021 | Prof. Ravindra A. Vyas | Advance Home Automation & Electricity Consumption Monitoring System | 1 Year | SSIP, Govt of Gujarat | 15,490 |
| 2021 | Prof. Viral Shah | Automatic Timer Based Irrigation System | 1 Year | SSIP, Govt of Gujarat | 10,000 |
| 2022 | Prof. Viral Shah | SMART Note:::Book | 1 Year | SSIP, Govt of Gujarat | 35,700 |
| 2022 | Prof. Sandeep Suthar | GeoSafe | 1 Year | SSIP, Govt of Gujarat | 19,800 |
| 2023 | Prof. Viral Shah | Automatic Traffic Management for Emergency Vehicles | 1 Year | SSIP, Govt of Gujarat | 17,200 |
| 2023 | Prof. (Dr.) Harshad Prajapati | Fruits and vegetables quality checker | 1 Year | SSIP, Govt of Gujarat | 10,500 |
| 2024 | Prof. (Dr.) Vipul K. Dabhi | Personalized government scheme recommendation system | 1 Year | SSIP, Govt of Gujarat | 20,000 |

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|---|---|---|---|---|---|
| 2025 | Prof. Deven A. Gol | Smart Rain Detector with Automatic Cloth Collection System | 1 Year | SSIP, Govt of Gujarat | 10,250 |
| 2025 | Prof. (Dr.) Vipul K. Dabhi | Conversational Voice Agents | 1 Year | SSIP, Govt of Gujarat | 20,000 |
| 2025 | Prof. Sunil K. Vithlani | Empowering Farmers: A Smart Approach to Early Detection and Management of Crop Diseases. | 1 Year | SSIP, Govt of Gujarat | 40,000 |