



Avery Dennison  
Foundation

The Avery Dennison Foundation

# SPIRIT OF INVENTION

(InvEnt)

Scholarship Program  
2019 winners



## Innovators



### FALGUNI MILIND MUTHA

Bachelor of Technology (Electronics and Telecommunication Engineering)

MKSSS's Cummins College of Engineering for Women, Pune

#### **VegSter: A fresh veggie salad vending machine**

*This idea will make nutritive food readily available to consumers in order to alleviate health and obesity disorders. VegSter is a vending machine that will dispense fresh and healthy vegetarian salads. It will offer a substitute to unhealthy fast foods by providing nutritive food, at affordable rates, at locations such as train stations, metro stations and college campuses.*

## Innovators



### NIRANJANA BHARADWAJ D.S.

Bachelor of Engineering (Mechanical Engineering)

M. S. Ramaiah Institute of Technology, Bengaluru

#### **DRONE (Detachable Rechargeable Omnipotent Non-metro Electric) Wheelchair**

*This idea will assist differently abled people by providing them with an affordable motorized wheelchair for independent movement. DRONE is an eco-friendly, detachable and portable motorized unit that can be attached to any existing wheelchair to convert it into a tricycle for easy mobility.*

### JUSTIN RITESH MIRANDA

Bachelor of Engineering (Electronics and Instrumentation Engineering)

M. S. Ramaiah Institute of Technology, Bengaluru

#### **Pressure Sensing Seat to Prevent Triple Riding on Two-Wheelers**

*Triple riding on two-wheelers and bikes is a significant contributor to road accidents and casualties. This pressure sensing seat will detect the number of riders and prevent the vehicle from starting if there are more than two riders on it. This affordable solution can save many lives by preventing accidents caused by triple riding.*



### Samruddhi Krishnakumar Nabriya

Bachelor of Technology

(Electronics and Telecommunication Engineering)

MKSSS's Cummins College of Engineering for Women, Pune

#### **Generate Electricity from Heat Generated by Cryptocurrency Mining**

*A large amount of heat is generated during cryptocurrency mining. The idea is to convert this heat to electricity that can be used again in the mining process or for street lighting. This will not only reduce the cooling costs for cryptocurrency mining but also reduce its overall carbon footprint.*



## Innovators



### VIGNESHWAR T

Bachelor of Engineering (Mechanical Engineering)  
M. S. Ramaiah Institute of Technology, Bengaluru

#### **Clips to prevent accidents due to Snapping of Powerlines**

*The idea is to attach cost-effective clips to insulate ends of the overhead wire as soon as it snaps. The usage of these clips will not only prevent electrocution related accidents but also reduce power cuts and replacement and wastage of wires.*

## Innovators



### ADITI SURENDRA TARATE

Bachelor of Technology (Electronics and Telecommunication)  
**MKSSS's Cummins College of Engineering for Women, Pune**  
**Self-learning Braille Slate**

*This modified Braille Slate with tactile sensors, driven by solar energy, aims at making learning for visually impaired students enjoyable and easier. It is a self-learning device that requires minimal instructor intervention making it a boon for those who live in rural and remote areas.*

### VIJAYA VAISHNAVI V.

Bachelor of Engineering (Biotechnology)  
M. S. Ramaiah Institute of Technology, Bengaluru

#### **Train Water Harvesting**

*Indian Railways is amongst the largest consumers of fresh water and does not have a comprehensive system to manage wastage and recycling of water. This idea aims at minimizing wastage of water by recycling the waste water generated in trains using principles of Reverse Osmosis (RO) and Ultra Filtration (UF).*

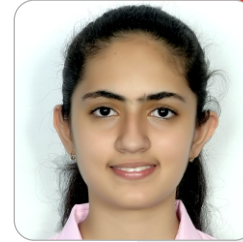


### BHAGYASHRI SANGTANI

Bachelor of Technology (Computer Engineering)  
MKSSS's Cummins College of Engineering for Women, Pune

#### **Thermoelectric Generator for Households to Utilize the Heat Released from Air Conditioners**

*Heat released by air conditioners increases temperature of surroundings. This idea aims at converting the heat released by household air conditioners to electricity which can then be utilized by households in various ways, e.g. to charge mobile phones and laptops and to heat water.*



## Innovators



### A. BALA ADITYA

Bachelor of Technology (Computer Science and Engineering)  
**National Institute of Technology, Tiruchirappalli**  
**Cost-Effective Smoke Purifier for Rural households**

*Cooking from woodfire in rural households causes significant air pollution, increasing risk of respiratory diseases in the household. This idea will not only reduce pollution but also carbon footprint of households that use wood for cooking by extracting soot that can be used as a fertilizer to improve soil quality.*

### ABHISHEK JEASON

Bachelor of Engineering (Mechanical Engineering)

**M. S. Ramaiah Institute of Technology, Bengaluru**  
**SEGRISAVE: An incentive driven waste management system**



*The lack of public participation in waste segregation process at large has resulted in mismanagement of waste. The 'SegriSave' application aims to motivate people to segregate waste and increase public participation in waste management with monetary incentive. This idea will also lead to job creation at various levels such as waste collection, transportation, segregation, biogas plants, pyrolysis plants and recycling units.*

## About Avery Dennison

Avery Dennison Corporation (NYSE: AVY) is a global materials science and manufacturing company specializing in the design and manufacture of a wide variety of labeling and functional materials. The company's products, which are used in nearly every major industry, include pressure-sensitive materials for labels and graphic applications; tapes and other bonding solutions for industrial, medical and retail applications; tags, labels and embellishments for apparel; and radio-frequency identification (RFID) solutions serving retail apparel and other markets. Headquartered in Glendale, California, the company employs approximately 30,000 employees in more than 50 countries. Reported sales in 2018 were \$7.2 billion.

Learn more at [www.averydennison.com](http://www.averydennison.com)

## About IIE

The Institute of International Education (IIE) is the leader in providing international education strategies and program services. We work with policymakers, educators and employers across the globe to prepare students and professionals for the global workforce and equip them to solve the increasingly complex challenges facing our interconnected world. With support from donors, we also create initiatives that protect students and scholars in danger, expand teaching and learning across cultures, and provide opportunities to underserved populations. A not-for-profit organization founded in 1919, IIE has a network of 18 offices and affiliates worldwide and over 1,300 member institutions.

Learn more at [www.iie.org](http://www.iie.org)

## **Avery Dennison Foundation Spirit of Invention (InvEnt) Scholarship Program 2019**

The Avery Dennison Foundation Spirit of Invention (InvEnt) Scholarship Program is designed to recognize and reward invention, innovation and excellence in high-achieving students studying in the fields of science, engineering and technology at selected higher education institutions in India. The merit-based scholarship provides a onetime scholarship of USD 1300 to the scholars. Each year 10 students are selected for this award in India. The Program is unique because it not only provides financial support to deserving undergraduate students studying in these fields, but it also provides them with access to enrichment and professional development activities, and opportunities to engage with Avery Dennison officials.

In addition to receiving scholarships, scholars attend a special workshop on invention and are honoured by the Avery Dennison teams at a recognition event. The program will provide continued support for leadership and innovation development through alumni engagement.

The Avery Dennison Foundation Spirit of Invention (InvEnt) Scholarship Program is administered by the Institute of International Education (IIE) on behalf of the Avery Dennison Foundation and the Avery Dennison Corporation.

Learn more at [www.applytoaverydennisoninvent.org](http://www.applytoaverydennisoninvent.org)

### **Participating Institutes for 2019**

- Delhi Technological University, Delhi
- Indian Institute of Technology, Bombay
- M. S. Ramaiah Institute of Technology, Bengaluru
- MKSSS's Cummins College of Engineering for Women, Pune
- National Institute of Technology, Tiruchirappalli