

duPont Manual Regional Fair- General Award Script - All Divisions

Crimson Path - In Person Comp

Animal Sciences

2nd Place

Armaan Brar - Crimson Path - In Person Comp

ANIM001 - How do different temperature levels affect the respiration rates of red-clawed crabs?

1st Place

Juliette Palmer - Crimson Path - In Person Comp

ANIM002 - The mechanism in heart water mixtures that attracts fruit flies

Behavioral and Social Sciences

3rd Place

Vaahini Sabbineni - Crimson Path - In Person Comp

BEHA003 - Determining whether Ethnicity Affects Time between Diagnosis and First Treatment for Breast Cancer

2nd Place

Caitlyn Fang - Crimson Path - In Person Comp

BEHA001 - THE SOCIAL MEDIA INFLUENCE OF BANDWAGON EFFECT ON CONSUMER BEHAVIOR IN DIFFERENT AGE GROUPS

1st Place

Maanya Sunkara - Crimson Path - In Person Comp

BEHA004 - The Effect of Art Exposure on the Creativity of Adults

Biochemistry

3rd Place

Lucy Koerber - Crimson Path - In Person Comp

BCHM001 - Different Teas Effect on Lactase

2nd Place

Lasya Thutupalli - Crimson Path - In Person Comp

BCHM004 - Is it possible to create sustainable leather out of Vegan Kombucha

1st Place

Ben Xie - Crimson Path - In Person Comp

BCHM005 - Monoterpenes from Trees and Alzheimers

Biomedical Engineering

3rd Place

Aishwarya Ramasamy - Crimson Path - In Person Comp

ENBM002 - Low-Cost Portable Device for At-Home Early-Stage Multi-Cancer Detection Using Bioimpedance and Multi-Spectral Imaging Technologies

2nd Place

Chaturya Paladugu - Crimson Path - In Person Comp

ENBM008 - Design of a Timely, Portable Calcium Measurement System

1st Place

Anvika Vangala - Crimson Path - In Person Comp

ENBM011 - 3D-Printed Constructs with Nanofiber Drug Delivery for UTI Treatment

Biomedical and Health Sciences

3rd Place

Himani Deo - Crimson Path - In Person Comp

BMED004 - The Identification of Risk Factors Associated with Elevated CAC Scores and Lipoprotein(a) Levels in Evaluating Cardiovascular Risk in Asymptomatic South Asian Populations

2nd Place

Akhila Nalladimma - Crimson Path - In Person Comp

BMED005 - EDiMA - Electroceutical Device for Amyotrophic Lateral Sclerosis(ALS) Monitoring and Therapeutic Potential

1st Place

Arjun Sharma - Crimson Path - In Person Comp

BMED008 - Unveiling Synergistic Anti-Inflammatory Effects of Neem Leaf Bioactives: A Low-Cost, Eco-Friendly Breakthrough for Sustainable Disease Treatment

Cellular and Molecular Biology

3rd Place

Jingbo Cheng - Crimson Path - In Person Comp

CELL001 - The effect of polystyrene microplastics on cancer cell proliferation

2nd Place

Adarsh Kannappan - Crimson Path - In Person Comp

CELL003 - Synthetic capacity of skeletal muscle fibroblasts in response to exercise-induced cytokines and hormones

1st Place

Ella Xing - Crimson Path - In Person Comp

CELL007 - The Effect of Dectin-1 on Trained Immunity and Overall Immune Response of Macrophages

Chemistry

3rd Place

Sasmitha Senthil Kumar - Crimson Path - In Person Comp

CHEM004 - Solving the Plastic Crisis: starch based bioplastics

2nd Place

Aalya Jha - Crimson Path - In Person Comp

CHEM002 - Development of a Gas Chromatography-Infrared Spectrometer for COPD Analysis

1st Place

Wanda Wu - Crimson Path - In Person Comp

CHEM007 - Combating PFAS Contamination: A Preconcentration Method for Detection in Drinking Water

Computational Biology and Bioinformatics

3rd Place

Helen Bai - Crimson Path - In Person Comp

CBIO003 - Exploring Viral Defects and Brain Replication Competence in ART-treated Macaques

2nd Place

Vishwaa Kannan - Crimson Path - In Person Comp

CBIO005 - Targeting Thermally Destabilized Intermediate Conformations to Identify Novel DNA G5 Destabilizing Small Molecules

1st Place

Japjee Dhall - Crimson Path - In Person Comp

CBIO004 - Creating a Breast Cancer Classification System Using Machine Learning

Earth and Environmental Science

3rd Place

Harsh Gupta - Crimson Path - In Person Comp

EAEV005 - What is the best way to solve or reduce the impacts of ocean acidification?

2nd Place

Aadya Mishra - Crimson Path - In Person Comp

EAEV009 - How can different factors impact PM2.5 levels and how can we make tailored policies/measures via algorithms in specific situations?

1st Place

Sriram Achaththekoot - Crimson Path - In Person Comp

EAEV001 - Comparative Effects of Natural Coagulants on Oil-In-Water Emulsion Separation

Embedded Systems

3rd Place

Jacob Anil - Crimson Path - In Person Comp

EBED002 - A functional prototype to detect the duration and color of light pulses for low visibility communication.

2nd Place

Ekantika Sanyami - Crimson Path - In Person Comp

EBED001 - Development of A Wearable Device Using Sensor Technology To Improve Spatial Awareness & Safety For the Hearing Impaired

1st Place

Annika Chadha - Crimson Path - In Person Comp

EBED003 - Vita Seat - An innovative Smart Toilet Seat with built-in UV sanitization for health monitoring of cardiovascular and respiratory diseases

Energy: Sustainable Materials and Design**3rd Place**

Livia Chaudhary - Crimson Path - In Person Comp

EGSD001 - Piezoelectric Energy Harvesting from A Self-Made Chaldni Plate and Piezoelectric Discs

2nd Place

Tanisha Parab - Crimson Path - In Person Comp

EGSD010 - Smart-Alerting System for Curved Roads.

1st Place

Sivani Babu - Crimson Path - In Person Comp

EGSD006 - Optimizing Biofuel Production: A computational approach to genetically modifying Giant Reed (arundo donax)

Engineering Technology: Statics and Dynamics**3rd Place**

Santoshi Kumaran - Crimson Path - In Person Comp

ETSD007 - The Development of Origami-Inspired Deployable Structures for Enhanced Efficiency in Disaster Relief Operations

2nd Place

Kabir Singh - Crimson Path - In Person Comp

ETSD001 - Optimizing Ionic Thrust Systems for Glider/UAV Applications

1st Place

John Weatherholt - Crimson Path - In Person Comp

ETSD010 - Designing and Testing a Dual Bell Rocket Engine

Environmental Engineering**3rd Place**

Saishreyash Ganteti - Crimson Path - In Person Comp

ENEV006 - The Effects of Solar Trackers on Solar Panels

2nd Place

Arya Walia - Crimson Path - In Person Comp

ENEV012 - Developing a solar powered, self watering, and smart irrigation system that uses recycled rain water.

1st Place

Jason Chen - Crimson Path - In Person Comp

ENEV002 - Tree Planting Hexapod Based Robot

Materials Science**3rd Place**

Gowshik Lavan Ramanathan - Crimson Path - In Person Comp

MATS006 - Accelerating Polyethylene Terephthalate Degradation: Determining the Efficacy of Hydrogen Peroxide as a Catalyst for Plastic Decomposition in Different pH Solutions

2nd Place

Anvi Sarve - Crimson Path - In Person Comp

MATS007 - From Trash to Treasure: Repurposing Styrofoam Waste into Sustainable Adhesives

1st Place

Vallabh Ramesh - Crimson Path - In Person Comp

MATS001 - Smart Functional Materials for Biomedical and Industrial Applications

Mathematics

3rd Place

Manasvi Bhavaraju - Crimson Path - In Person Comp

MATH001 - Development of a Diffie-Hellman-like Algorithm Using p-Adic Arithmetic to Optimize Key Exchange

2nd Place

Advika Rastogi - Crimson Path - In Person Comp

MATH006 - Data-Driven Irrigation Demand Prediction Using Differential Equations and Machine Learning

1st Place

Manit Gupta - Crimson Path - In Person Comp

MATH004 - A Novel Deterministic Algorithm for Finding Mersenne Primes for Applications in Cryptography and Pseudo-Random Number Generation

Microbiology

3rd Place

Adaora Ozor - Crimson Path - In Person Comp

MCRO006 - Natural Anti-bacterial Solution with Persimmon Calyx and Rainwater

2nd Place

Thanush Manikanta Anantha - Crimson Path - In Person Comp

MCRO001 - Which antiseptic is superior?

1st Place

Nivedha Ramabadran - Crimson Path - In Person Comp

MCRO010 - The Effect of Caffeine on Planaria

Physics and Astronomy

3rd Place

Anand Thakur - Crimson Path - In Person Comp

PHYS008 - Top quark identification using Machine Learning

2nd Place

Adithya Raghunath - Crimson Path - In Person Comp

PHYS001 - The Effects of Wing Surface Area, Airfoil, Wing, and Body Shape on Lift and Drag

1st Place

Ethan Tang - Crimson Path - In Person Comp

PHYS007 - The Novel Dependence of Flow Rate on the Order of Constrictions

Plant Sciences

3rd Place

Charvi Nambi - Crimson Path - In Person Comp

PLNT004 - Effect of Stabilized Hydrophilic Polymers on Water and Nutrition Content in Soil & Plant Growth

2nd Place

Erica Wang - Crimson Path - In Person Comp

PLNT002 - Cost-Effective Biodegradable Hydrogels for Moisture Retention in Agriculture

1st Place

Hashir Adnan - Crimson Path - In Person Comp

PLNT003 - Enhancing Plant Growth in Simulated Martian and Lunar Soil Using Biofertilizers.

Robotics and Intelligent Machines

3rd Place

Jilly Choi - Crimson Path - In Person Comp

ROBO001 - Design and Control of Humanoid Robot TALOHS, Biomimetic Hand, and TeleOp Proxy
Samuel Kingston - Crimson Path - In Person Comp
ROBO008 - Machine Learning-Driven Segmentation and Classification Models for Plant Disease Detection and Diagnosis

2nd Place

Rishik Saravanan - Crimson Path - In Person Comp
ROBO005 - Frugal Object Detection Patient Assistant Robot

1st Place

Adharsh Jaikumar - Crimson Path - In Person Comp
ROBO007 - EyeNova: Development of a Novel Slit-Lamp and ResNet Platform for Early Non-Invasive Detection of Glaucoma and Kayser-Fleischer Rings in Neurological Wilson's Disease and Liver Failure

Systems Software

3rd Place

Yashvin Yuvaraj - Crimson Path - In Person Comp
SOFT018 - Evaluating the Accuracy of AI Detection Tools in Identifying AI-Generated vs. Human-Written Content Across Various Assignment Formats

2nd Place

Cesar Brown - Crimson Path - In Person Comp
SOFT001 - Predictive Analysis of Distracted Driving with Machine Learning and Visual Focus

1st Place

Shlok Jena - Crimson Path - In Person Comp
SOFT004 - Enhancing Breast Cancer Risk Prediction: Integrating RN-Autoencoder and Attention Mechanisms for Improved Gene Expression Classification

Technology Enhances the Arts

3rd Place

Akshitha Sriramoju - Crimson Path - In Person Comp
TECA001 - Goal: develop a program to identify colors in photos to assist those with color blindness.
Keira Wolek - Crimson Path - In Person Comp
TECA004 - How Does Room Size Affect Resonant Frequencies?

2nd Place

Elijah Tran, Arieanna Washington - Crimson Path - In Person Comp
TECA002 - Refab: Developing a Convolutional Neural Network Powered Program to Aid Sustainability by Promoting Upcycling

1st Place

Maylin Kidwell - Crimson Path - In Person Comp
TECA003 - Algorithmic Image Enhancement by Combining Multiple Images

Translational Medical Science

3rd Place

Charles Cao - Crimson Path - In Person Comp
TMED002 - Enhanced Inhibition of Cancer Cell Proliferation through Synergistic Action of Grape Seed Extract and Nicotinamide Riboside

2nd Place

Ajay Sutaria - Crimson Path - In Person Comp
TMED003 - NeuroGait – Neuropathy Evaluation Using Real-time Observation and Gait Analysis via Insole-integrated Tracking

1st Place

Joseph Nidhiry - Crimson Path - In Person Comp
TMED001 - Analysis of Retinal Degeneration in a Pig Model of Stargardt's Disease