2021 STUDENT TECHNOLOGY SHOWCASE

PAECT

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Pennsylvania Association of Educational Communications and Technology

VIRTUAL SHOWCASE
MAY 2021

Group 1: **Mechanics of Movement**
Gettysburg Area High School * Gettysburg Area School District * Gettysburg

Students learn how to draw basic forms and make them move. Observation of timing, arcs and the basic mechanics of movement is a key proponent for outcomes in this project after learning how to develop animation through the use of technology software and the Wacom tablet.

Advisor: Julie Myers

Student Presenters:
Harrison Kulkinski
Katie Wivell

Representative: Dan Moul
Senator: Doug Mastriano

Group 2: **So you want to be a YouTuber?**
Gettysburg Area High School * Gettysburg Area School District * Gettysburg

This project was created as an interactive quiz to test the knowledge of different FBLA trivia questions and provide an easy to use and easily accessible application. Curriculum areas include Computer Science and Business Education and Technology

Advisor: Eric Wadel, Justine Sieg

Student Presenters:
Ethan Keyser

Representative: Dan Moul
Senator: Doug Mastriano

Group 3: **BuzzBand: Exercise Motivator for Youth with Autism**
Carnegie Mellon University

The Girls of Steel, a FIRST® Robotics Competition team of high school students based at Carnegie Mellon University, participated in the FIRST Innovation Challenge this year. The team created a device to address the 2021 challenge, “Identify a problem or opportunity and design a solution to help people (or a community of people) keep, regain, or achieve optimum physical and/or mental health and fitness through active play or movement.” The device, the BuzzBandSM, is a vibrating armband that caters to the needs of youth facing sensory, physical, and emotional challenges associated with regular exercise. Its purpose is to motivate users to establish consistent exercise routines through the application of sensory stimuli. While our product is accessible to everyone, it is directed towards individuals with sensory processing disabilities, particularly those on the autism spectrum.

Advisor: Theresa Richards

Student Presenters:
Aditri Thakur
Janise Kim

Representative: Dan Frankel
Senator: Jay Costa

Group 4: **Parental Forgetfulness Prevention**
Jim Thorpe Area High School * Jim Thorpe Area School District * Jim Thorpe

Child Safety Seat Alarm made with an Arduino and coded using C++. It is a simple solution to prevent drivers from leaving someone in a child safety seat. The overall objective of this project is to create a way to solve one of the most dangerous problems facing the world; leaving a child in an unattended vehicle. Our vision is to create a virtual assistant to notify the driver of a vehicle when they leave a child in a car. The overall purpose is to help parents and, ultimately, save lives. The creators, Jason and Connor, are both seniors.

Advisor: Dane Gabrielle

Student Presenters:
Connor Rodgers
Jason Chiulli

Representative: Doyle Heffley
Senator: John Yudichak

Group 5: **Math Digital Escape Rooms**
Trumbauersville Elementary School * Quakertown Community School District * Quakertown

Fifth grade students at Trumbauersville Elementary School in Quakertown, PA created a digital math escape room for their peers using Google forms and creativity.

Advisor: Lauren Zeigler

Student Presenters:
Arianna Adams
Laura Gable
McKenna Sparwasser

Representative: Craig Staats
Senator: Bob Mensch