

Yorktown students win science award

BY BRIAN MARSCHHAUSER
EDITOR

Two science research students at Yorktown High School have been recognized for their innovative projects.

Seniors Liam Cushen and Emily Huang were awarded the Acorda Scientific Excellence Award, which was created to encourage students to pursue careers in the fields of science, technology, engineering and math (STEM). Winners receive a plaque in recognition of their outstanding research, and their school receives an award for display.

Cushen used algorithms to forecast the availability of solar power. The algorithms looked at photographs of the sky, taken at 30-second intervals. Able to detect clouds, and the movement and therefore speed of the clouds, enabled the algorithms to determine whether they would interfere with the sun's radiation reaching a solar panel. Cushen's work was motivated by climate change, and was aimed at improving the efficiency of solar power.

"I got involved with my project because I wanted to combine my passion for the environment and renewable energies with computer science," Cushen said. "After reading a lot of journal articles on solar energy and 'solar forecasting,' I realized that one of the

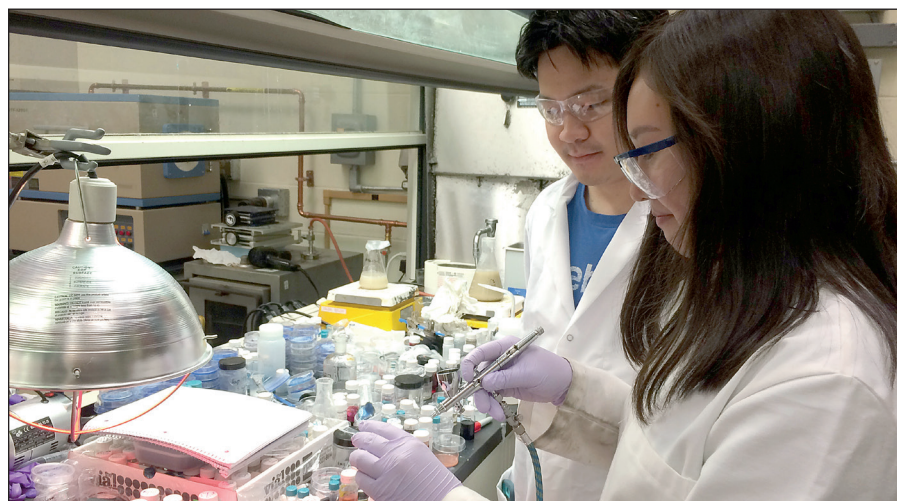


PHOTOS COURTESY OF KEVIN CRONIN

Liam Cushen

leading experts in the area worked very close to where I live. After I reached out to him, he began helping me immediately, and we began crafting my current project."

In the fall, Cushen will attend Cornell



Emily Huang with her mentor

University, where he will study business and computer science.

Huang's project looked at different materials that would change color when placed under physical stress. Each year, many bridges collapse, half due to a structural deficiency, according to studies. While there are many ways to detect strain, Huang's materials have a more sensitive color change, are inexpensive and have simple production methods.

"I chose this project because I really wanted to do something in engineering,"

Huang said. "I think engineering projects really foster a sense of creativity and ingenuity that I thought were valuable skills in the future. I was also very interested in this color changing mechanism, and I thought that it would have a lot of applications in the real world—not only to act as a strain sensor, but also perhaps in smaller materials like rubber bands or toys."

In college, Huang hopes to study something engineering-related, possibly within the field of materials science. She would also like to explore other fields.

HOMES OF HISTORIC DISTINCTION

Grace Building recaptures the spirit of old 'downtown' Yorktown

In 1870, the sleepy agricultural hamlet of Yorktown got an infusion of energy with the construction of a railroad line that originated in New York City. The Yorktown Heights train station was added in 1888, establishing a vital link to the metropolis, and almost immediately, stores, houses, a hotel, churches, a school and other services sprang up around the "Old Put," as the railroad was dubbed.

By the turn of the 20th century, gracious homes began to fill in the area along Underhill Avenue, which was then known as State Road east of Route 118. One of the more imposing homes, and one of the only ones designed by an architect, is the structure now known as the Grace Building, once a home to legendary long-time Yorktown Supervisor Edward B. Kear. And, in a pleasant twist of fate, for the past 15 years, that same home, restored and polished, has served as the law offices of Yorktown's current town supervisor, Michael Grace.

When the house was built, the eminent Kear, who also served as town clerk, county registrar of deeds, justice of the peace and justice of the court of sessions, could not have known that the future would place the hamlet's town hall directly across the street from his residence, which also served as his office. He would, instead, have valued the convenience of a quick walk to the Yorktown Heights Station of the "Old Put," or perhaps enjoyed a picnic in Railroad Park as the Yorktown Band played a summer concert from the porch of the nearby Whitney Hotel, which from 1882 until its destruction in 1944, was a



PHOTOS COURTESY OF NANCY MILANESE

The Grace Building is located on Underhill Avenue, across the street from Yorktown Town Hall.

local destination.

Edward Kear died in 1911 and his home languished in an estate trust for many years, and might have fallen to the wrecking ball had Grace not purchased and restored it in the early 1990s. Now, even though the building is a functioning law office, it still retains the domestic charm of a turn of the century residence. What was once a family dining room, with warm hardwood floors and a fireplace, now functions as a conference room. The

grand double parlor, little altered by time, forms a reception area and office.

The Grace Building today reminds Yorktown residents of the town's storied past, when the railroad provided a nexus for communication and socialization. This one-time home of Edward Kear, who served as town supervisor for 13 years, is one of the last of the grand Victorian homes that were built around the town center that the railroad established in the late 19th century, and has recently been



named a Home of Historic Distinction by the Yorktown Landmarks Preservation Commission.

The Yorktown Landmarks Preservation Commission is always seeking applicants for the Homes of Historic Distinction Program. To qualify, homes must have historical significance based on age, architectural style, past ownership or association with a person or event important to Yorktown's history. Through the program, plaques designating the basic facts about each house's history are fabricated and installed on or around the home. The commission will work with each homeowner on appropriate wording for the plaque and will assist in research. The cost for the application and the plaque is \$100. Applications are available online at yorktownny.org/planning or by emailing nmilanese@yorktownny.org.

This article was submitted by the Yorktown Landmarks Preservation Commission as part of a series highlighting Yorktown Homes of Historic Distinction.