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Poolesville students take first place in national cyber security challenge [by Samantha Schmieder](#) *Staff writer*

A team of three students from Poolesville High School placed first in New York University's Polytechnic School of Engineering's Cyber Security Awareness Week High School Forensics Challenge each winning a \$14,000 scholarship to NYU if they attend.

Umesh Padia, 17; Kent Ma, 16 and Jonathan Ni, 16, competed against 600 teams across the country and overseas in the preliminary round which was completed on their own time in the month leading up to the finals. Their performance earned them an all expenses paid trip to New York from Nov. 12-15 in order to compete against the 11 other final teams.

"For the preliminary round for the competition they have a month to create a forensics report of the evidence that is released at the beginning of the month," said Mark Estep, head of the computer science department at Poolesville.

This year, teams were given evidence for a case resembling the real and recent Target information breach that left millions of customers' credit card numbers and information vulnerable. Students had to use evidence laid out to them in files and online to figure out who hacked into the system of a fictional company named "Bullseye." Teams looked at cyber forensics clues which led to different characters within the story with different motivations.

"[NYU] gave us a copy of Bullseye's servers and our goal was to analyze and find out who was to blame," Padia said.

However, in order to make sure no one person or team had an unfair advantage, Estep explained that the students could only use free accessible tools and software packages to do their work.

Estep is also in charge of the computer science club at Poolesville High School, making him the sponsor or mentor for the students who competed in the challenge.

"I'm in charge of all of them, but I don't do any specific work with the kids. We talk about general things," Estep said. "Their primary learning comes through their computer team and the older kids help the younger."

For the final round, teams had to use the information they gathered in the preliminaries to solve a murder of one of the fictitious characters that is introduced to them in the scenario. In order to do so, students were given the victim's phone with more clues to figure out the hacker as well as the murderer. Estep said that was the first time he had seen the teams get an actual phone to look through for clues rather than just a digital picture of a phone that they had to look through on the computer.

Padia, of Germantown, explained that the 12 teams in the final round are all competing against each other in one room and they all only had a few hours to investigate and come up with an answer.

“CSAW is always a thrill, you don’t know where the next piece of evidence is,” Padia said.

When the boys were announced as the winners at the end of the competition they were all excited because their hard work paid off.

“Oh yes, definitely, I didn’t expect it at all. I probably had one of the strongest reactions, I jumped up,” Ni said.

Each member of the Poolesville team received a scholarship to NYU Polytechnic School of Engineering if they are accepted and decide to attend. Winners received \$14,000 a year and each finalist received \$7,000 a year. Estep said one of the great things is that scholarship money is cumulative, which means that Ni and Ma, who were in the final round last year as sophomores, have a combined potential scholarship amount of \$21,000 now.

Additional finalists included another team from Poolesville High School, as well as a team from Montgomery Blair High School in Silver Spring.

“We had somewhere around 15 teams start the process, freshman through senior,” Estep said, “A lot of freshman start with it because it’s fun and as they get older they realize it isn’t a passion or it is a passion.”

Poolesville High School is a magnet school attracting students from throughout the county and Ni, Ma and Padia are in the science, math and computer science magnet program.

“I came in really interested in computer science. I started doing a couple competitions,” Padia said. “I started getting better as I started competitions, then I started winning competitions.”

While Padia and his teammates have proven that they are quite good with cyber forensics, Padia is also passionate about biology and is not sure what he wants to pursue.

“I want to be able to apply it to something that is going to help the everyday person,” Padia said.

sschmieder@gazette.net