Joshua Grieve Earns AP + PLTW Achievement Award in Engineering

Bullitt East High School Senior Joshua Grieve is the first Bullitt County students to be awarded the AP + PLTW Achievement Award sponsored by Project Lead the Way and AP Central.

According to Bullitt County Area Technology Center Principal Darrell Vincent, award recipients must receive passing scores on a combination of 3 AP and PLTW Engineering courses.

"Joshua Grieve took three engineering courses and AP Physics from me as a teacher at Bullitt East," Vincent said. "Two years ago, as a sophomore in my Principles of Engineering Course, Joshua became so enthused about coding that he became a part of our first competitive VEX robotics team."

"During that summer," Vincent continued, "Joshua taught himself to code in the C++ computer language. Joshua went on to take the Digital Electronics course as a junior where he scored an advance rating on the end of course assessment from PLTW."

Joshua initially informed Mr. Vincent of his engineering honor.

"When I told Mr. Vincent about the award, I had no idea I would get so much attention," smiled the 18 year-old son of Scott and Suzanne Grieve. "In fact, I wasn't even aware that I was the first to receive it! I simply wanted to share my achievement with the teacher that had encouraged me so much in that field; without Mr. Vincent, I most definitely would not have been able to come close to such an honor. Bullitt East has an amazing engineering program."

Joshua said while he is thrilled to be the first award recipient, he has a feeling he will not be the only student much longer.

"I look forward to the day that there 50 or 100 other students, showing the excellence that Mr. Vincent started," he said.

Joshua took three engineering courses (none AP) as well as AP Physics under Vincent but the score doesn't contribute to this award because there is no AP option for the PLTW engineering courses.

"The award does depend on receiving qualifying/proficient scores on the engineering end of course assessments and AP exams," Vincent explained.

"I absolutely loved those classes; they were my favorite every year," he said. "In them, I not only got to study and learn about computers, programming and engineering, but also got to do hands-on activities and experiments involving real world problems."

Joshua often stayed after school finishing up projects or working on an idea that he had.

"I would work at home, often getting ahead of the class, simply because I enjoyed it," he said. "The classes were also challenging. The concepts were not very different from what is taught in a math class, but application often, if not always, did something unexpected. Mr. Vincent insured that every student was adequately challenged. Whenever I got ahead of the class, he would give me just a little bit of information about another way I could have done the project, or pull out a new part and say that he hadn't had a chance to figure it out yet - would you like to try? This allowed me to learn at my own pace."

Coding has become Joshua's passion and fascination.

"I absolutely love to code. It is a great way to pass the time and it works the mind," he said. "It's somewhat like a puzzle: the picture is the task you want the computer to do, and the pieces are all of the functions, objects, and statements in the programming language. And nothing is cooler than watching a computer do exactly what you told it to do!"

He started to learn how to code in the middle of his freshman year. Vincent had mentioned that students were going to learn to program the following year and Joshua used that as an excuse to purchase some books to teach himself.

"I spent that summer watching YouTube and reading through forums honing my skills," he said. "Programmers are greatly needed in the professional world. Nearly everything runs off of a computer, and someone has to program them! Websites, operating systems, web

browsers, calculators, smart phones, video games, banking, national defense. Programmers are involved in every facet of life; more so than perhaps any other profession."

Joshua is currently taking AP Calculus to further his studies and is enrolled in the Information Technology Program offered at the Riverview Opportunity Center.

He is looking at two colleges: Cedarville University and the University of Louisville. He intends to double major in Computer Science and Computer Engineering.

Joshua has been a five year trumpet player of the award winning Bullitt East Charger Marching Band and is a regular performer at his church, First Baptist of Mount Washington.

He has a younger brother, Caleb, a sophomore at Bullitt East.

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