

Personal Statement

From an early age, I have always been deeply interested in computing. I started coding when I was in 8th grade. During my 8th grade, I started playing around with educational software for video game development with basic block coding. Later participated in a Kodu Game Lab National competition and won third place. My school teacher saw my potential in computing and recommended me to participate in Microsoft's App Idol competition. To my surprise, all the participants were college students and full-time employees and there I taught myself to code in C# to develop Xbox 360 and Windows phone games.

Next year I started a coding club at my school to share what I learned with my schoolmates, since then during middle school and high school I taught other students basic programming, app, and game development. In my last year of high school when I was taking a physics class. Prior to that year, as a requisite of my school were student have to make a math or science research project, I did a research about the distortion of different types of electromagnetic waves on materials to then try to make a sensor capable of identify materials on a surface, so I had to learn the fundamentals of physics and the different laws of electromagnetic waves. The professor giving that subject it was his first time teaching high school students so all students were having trouble learning resulting on the 95% to fail the first two exams. Because of my previous physics learning experience, I was able to pass the exam, so I started teaching all my classmates the physic topics given in class after school the same way I learned it by myself. On the next exam, most of the students passed the test. When the professor discovered that I was helping my classmates to learn he started to attend to my study sessions to understand the way high school students understand physics and at the end of the year, 98% of the students passed the course.

In college, I have participated in undergraduate research the first one on autonomous vehicle development and educational game development. Since then I kept working on artificial intelligence projects and research programs in my university, as a co-op student at MIT and currently as a collaboration between UPRM and MIT.