

My Junior Seminar project “Magic vs. Math: 10 Types of People,” is a updated culmination of 6 months of work in Math 39700. The project revolves around a concept of “Magic Boxes” and their relationship to base 10 numbers expressed as binary, ternary, and different base values in mathematics. My knowledge on the topic dates back to my freshman fall semester course “Problem Solving” under the administration of one of the two of my current Junior Seminar professors, Osman Yurekli. Problem Solving was a 300 level class, that I was encouraged to take by my advisor, Jim Conklin. As a freshman, coming into a 300 level course off the bat was definitely intimidating, however, the problems faced led me to realized there were so many branches of math I had never heard of before, and inspired me to dive into what I’ve now found as my favorite realm of mathematics, Number Theory. These “Magic Boxes” appeared in problem solving about 4 or 5 weeks into the semester, and no one could figure out the secret when they were first given to us. However, I was determined to find out his secret, and kept working until I eventually found it; binary. After knowing this secret, the rest was easy, and after being enrolled in Junior Seminar, I realized that this was exactly what I wanted to pursue. Being able to blow people’s minds with math not only reminds me how much I love my major, but is also simply fun. This is the reason why I chose to continue on with this project, and the Whalen Symposium will not only give me a chance to voice my passion for math and continue practicing my presentation skills, but also blow some more minds with my “magic” while I’m at it.