



NAME: VIKAS MATURI

SCHOOL: Carmel Senior High School, Carmel, Ind.

YEAR: Senior

HOMETOWN: Carmel, Ind.

PROJECT: Engineered Intraocular Injection Guide (IIG): Pain Reduction in Ophthalmic Disease Treatment

FIELD: Engineering

MENTOR: Dr. Kimberly Vogt, Professor of Biology, Marian University

“I developed a device that significantly reduces pain during the treatment of major eye diseases.”

While Vikas Maturi worked a summer job at an eye disease treatment center near his home, he became motivated to develop a product that could reduce or eliminate pain from pre-injection procedures for ophthalmic patients.

Vikas Maturi aspires to be a social designer or design engineer and anticipates majoring in product design and/or biomechanical engineering in college. Vikas is especially inspired by the growing incorporation of engineering in the social design world. Vikas loves his Engineering Design and Development class. The course is a seniors-only team-based capstone project where students design and prototype a product that solves a distinct community need. Currently, Vikas and his partner are modeling and prototyping a product that captures, redirects and filters flood water in developing countries. Vikas especially likes that this project-based subject provides him with an opportunity to utilize his own strengths in product design while teaching others and creating a product that can truly benefit society.

Outside of the classroom, Vikas enjoys playing soccer and piano, and also serves president for TechHOUNDS Robotics, for which he lead a 140-person team and implemented STEM outreach initiatives. If he could talk to any person from history, it would be Leonardo Da Vinci because of his appetite to know every aspect of the world – from technology to art.