

Are You Smarter than a Sentry Gun?: An Investigation of Motion Tracking

Zhang, Jovan (School: Patrick Henry High School)

Jandura, Sven (School: Patrick Henry High School)

Sidley-Parker, William (School: Patrick Henry High School)

In this project, we developed an intelligent motion tracking system incorporating both software and hardware. The software reads in a video stream from a webcam, processes it to recognize moving targets, and converts this information into motor movements so that the sentry system can aim at the target. To demonstrate this capability, we built a prototype of the sentry system and used the software to control it in such a way that the aiming system always points to the main target. To the best of our knowledge such a project has seldom been realized.