

Thesis Project Portfolio

Project Romulus

(Technical Report)

An analysis on the culture of Airsoft players

(STS Research Paper)

An Undergraduate Thesis

Presented to the Faculty of the School of Engineering and Applied Science

University of Virginia • Charlottesville, Virginia

In Fulfillment of the Requirements for the Degree

Bachelor of Science, School of Engineering

Andrew Morrison

Spring, 2025

Department of Computer Engineering

Table of Contents

Sociotechnical Synthesis

Project Romulus

An analysis on the culture of Airsoft players

Prospectus

Sociotechnical Synthesis

Airsoft is a growing sport that depends heavily on physical strength, endurance, and reaction time. This can make airsoft very hard to play with any form of disability, or dexterous impairment, such as arthritis. To address this problem, me and my group members developed a handheld harness that can autonomously aim an airsoft gun for the user. This allows people to play airsoft without needing the hand-eye coordination or reaction time to aim at opponents. Though this does raise several ethical concerns about the nature of airsoft.

With this concern it is very important to consider the human and social dimensions of this technology and if this technology should even exist. Many studies have found that airsoft can be a great pastime, while others have found that it increases violence. My research is into how the culture of airsoft players is influenced by the sport that they play. To answer this question, I participated in an airsoft game at two different locations, one indoor and one outdoor. During the games I observed the actions of the players and how they interact with each other and me. I found two very different cultures at each location, largely cultivated by the attitude of their owners. One owner downplayed airsoft as a ‘silly kids’ game’ and this led to an opening and welcoming player base. The other owner was generally uncaring and blasé, which led to an antisocial and closed off community. This, combined with the prior research points to two subcultures of airsoft, one that is open and fun, and one that is closed off. Looking at both my capstone project and my research, I am trying to improve accessibility in the airsoft community while ensuring that it is a community is one worth investing in.