

2018 Research Week Proposal

Title: Glasses Project

Program of Study: School of Engineering and computer Science

Presentation Type: Print Poster (Applied)

Mentor(s) and Mentor Email: James Long (jllong2@liberty.edu), Carolyn Ziebart (ctiebart@liberty.edu)

Student Name(s) and email(s): Corey Messer (cmesser7@liberty.edu)

Category: Applied

Abstract: The task at hand was to design and prototype a usable product that would have a high social impact. This paper overview the Wasson SE solution development process used to create corrective lenses with adjustable frames meant to help those with vision impairment in low-income settings. This study found, that hundreds of millions of people are visually impaired in the world, and many of those impaired living in these low income settings mostly reside in undeveloped countries. A management plan for this project is presented along with the description of the new product design. The constraints and objective for the project are discussed and the work done was validated and verified in order to ensure all requirements were sufficiently met. These corrective lenses can be provided in a kit, and easily given to children's homes and schools when visited by humanities aid or missional organizations. The research and prototyping found in this study is the first draft or the beginning of sustainable solution that can be used to combat vision impairment. This design has the potential to have lifelong positive effects on the social fabric of communities and people groups all around the globe, and enable them to see the world for the first time.