## **Thesis Project Portfolio**

### **Educational Multiplayer Outlet (EMO)**

(Technical Report)

# An Inspiration to Skinny Girls and an Aspiration to Bigger Girls: The Ethics Surrounding Brandy Melville

(STS Research Paper)

### An Undergraduate Thesis

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

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Department of Computer Engineering

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#### **Sociotechnical Synthesis**

Socio-technical Synthesis: Gamifying Education Through the User

My STS research builds off of ethics found in my senior capstone project, as it explores what it means for engineers to design with users in mind, and how their assumptions about those users inevitably shape the technologies they create. For my senior capstone project, my team and I decided to make a product that focuses on interactive learning for children, specifically 3rd-5th grade students. In doing so, we had to make assumptions about who our users are, and how they can ultimately best interact with our system. However, for my STS research, I decided to directly build off of this concept by understanding and applying the ethical framework of User Configuration on a clothing business popular among young women and teens.

For my senior capstone project, my team and I wanted to explore how gamifying education could improve student learning and even student interaction. To do this, we decided to build a two-player video game console based on the character "BMO" from the show Adventure Time. The console included a teamwork-based game that walks the two players through an engaging storyline, teaching them the value of plot progression. We made sure the console had a simple interface and simple controllers so that it was accessible to most, if not all, 3rd-5th grade students. Once our project was completed, we then demonstrated the console at a neighboring elementary school, and had multiple students interact with it with their peers.

My STS research builds off of this idea of designing and developing with users in mind, and analyzes the clothing brand Brandy Melville and its controversial history. Brandy Meville is known for facing tons of criticism for making its clothing in only one size, a womens extra small/small. However, my argument for why it gets the criticism it gets is centered around the way the brand presents itself to the public eye through its website and social media accounts.

Through the lens of User Configuration, Brandy Melville purposely advertises itself in a way that favors users who are known to be young, thin, and petite. Sometimes the brand goes as far as only posting models who are light in skintone. Those who feel negatively affected by Brandy Melville are the actual users who do not fit its small pool of configured users.

Working through both components throughout the year taught me valuable lessons I plan to apply throughout my engineering career. For example, I now recognize how designing with a narrow group of users in mind can unintentionally marginalize everyone outside of that group. When it comes to the future projects I will be a part of, I will make it a priority to make sure the technologies I create ultimately do not segregate groups of people, but instead brings them together and overall empowers them.