Games are part of my life. I developed my first game, *Alpaca Village*, in high school to cheer up my best friend, who had been very depressed after a sports injury. As I designed the game, I focused mostly on the core mechanic and secondary mechanics on different levels. The game was about expressing happiness and making the player carefree like a child again so the finalized mechanics involved erasing objects from the screen like using an eraser, trying to mimic the behavior of playing with a drawing book. After endless testing, developing, and testing again, we published our game and showed it to our friends. When they were laughing together, rubbing their hands on the screen to erase evil pigs to defend the village of alpacas, I fell in love with making games, especially the designing of the mechanics, as I felt like even though I was just watching them play, I could still engage with what my players were experiencing through their interactions with the game. I felt like they were interacting with me, communicating with me through my deliberately designed gameplay. Four vital components - story, art, mechanics, and technology - make up a game. Mechanism, as an expression of interaction, is what makes a game's experience truly unique. From then on, I realized my passion for building games and creating experiences through innovative mechanics.

Eager to pursue this further, I chose an undergraduate university that encourages interdisciplinary studies. I majored in Computer Science to create more diverse mechanics for my game and to gain insight into the technological aspects of game development. For example, different patterns can help me organize codes to produce better performances, experience with Virtual Reality can help me make games in another media different from traditional PC or mobile, and my coursework in machine learning will one day help me construct more lifelike AI. Also, I minored in Art to attain creative vision for my visual design.

While in college, I realized something different about mechanics that has influenced me ever since as I made another game, *Duot*. The game's inspiration came to me when I was in the Behavioral Science class listening to the stories of how great partners built thriving businesses together. Then I suddenly had the idea: why not make a game addressing the partnership between two individuals who help each other in a chaotic world and conquer all obstacles? So, as I started prototyping, I tweaked the mechanics repeatedly, from initially two balls following each other, to them mimicking each other's actions, to finally having them rotate around one another, all based on the idea of showing the players what great partnerships should be like. I made my game demonstrate this partnership by letting one protagonist serve as the axle-center while the other defends them both from invading enemies. However, the two protagonists can rotate and switch positions in order to adapt to new situations. While making this game, combined with my reflection on making Alpaca Village, my passion for mechanics became clearer to me: I am trying to convey my ideas and my feelings through the unique experience created by interactions. We built Alpaca Village to convey the feeling of happiness, and I built Duot to address how a partnership works. Mechanisms in my games serve to express my feelings and understanding of the world.

This realization made me more serious about making games and drove me to pursue two internships, hoping to learn more about the game industry. Over two summers, I worked as a game designer in two incredible game companies, Netease Game and Baitianinfo, and I learned a lot about the industry design method and tools

for developing games. I gained knowledge of and got my hands on game system flow design, MMOs quest design, emotional arc of storytelling, and tools like Behavior Tree and version control. Most importantly, I learned how to collaborate with and express my ideas clearly to team members during both my internships, which is the most useful ability for a game designer. Afterwards, I integrated some of the industry approaches into my own development, such as using rapid prototyping to quickly decide core mechanics on *Merger*, using the emotional arc to create a better storyboard on *Medieval Cyprus*, and using version control to organize all my projects. Enhancement in methods greatly improves the speed, tidiness, and quality of development of my later games.

I am pursuing my lifelong dream of becoming a game producer, or more aptly, an experience creator. Entertainment Technology Center (ETC) was the start of my dream. *The Art of Game Design: A Book of Lenses* by Jesse Schell encouraged me to step into game design in the very beginning and to create *Alpaca Village* in high school. It also continued to guide me through every phase of my development. Every two months I would re-read the book and gain more from it every time. For instance, I recently understood what the book means by drawing inspiration from unconsciousness when I was stuck and started having ideas right before sleep. However, ETC is not only about games, it also incorporates a wide range of technologies into games. Going through the program's project list, I could see that most of the projects, like Blueprint and Cozmore, utilize and even experiment with cutting-edge technologies such as Virtual Reality, Augmented Reality, Tracking, and Robots, creating innovative interactions that are not even possible with traditional gaming devices.

Having built a Virtual Reality game, *Medieval Cyprus*, last semester, I was fascinated by the numerous possibilities that Oculus Rift provides. Through research and development, I saw new types of interactions developers are able to utilize, such as hand tracking, movement tracking within a 3-dimensional space, and fingers simulation instead of traditional touching and dragging.

Developing *Medieval Cyprus* merely opened my eyes to the new mechanics one can create when combining a new technology with games and ETC provides the perfect opportunity to experiment in an environment with state-of-the-art devices. With a wide incorporation of advanced hardware and software, ETC can inspire me to come up with new ideas for games experiences. Take the mechanic of rubbing objects on a 2-dimensional screen in my first made game Alpaca Village as an example, incorporating it with VR will generate a 3-dimensional hand moving mechanism, allowing players to utilize all of their fingers to rub and to create a more diverse pattern in gameplay. With a simple combination of a new technology, my game can improve greatly in its depth and so can any other game. This way, ETC can broaden my views, bring me out of the traditional video game creation, and show me a wider world where I am provided with lots of new tools to create experiences with.

Moreover, I am excited about the courses that are provided in the first semester, especially Building Virtual World. Being able to learn from my all-time mentor Jesse Schell has always a dream of mine. Also, I appreciate the curriculum structure where three out of four semesters will be dedicated to projects, which is the best way to learn as well as to innovate in my opinion.

As a person who has strong initiative as well as experience with game development, I want to join and hope to become a great addition to the Entertainment Technology Center. ETC's education fits perfectly with my objectives and I am able to contribute to the student body by not only providing technical support such as coding, developing VR related project using my undergraduate study and research knowledge, but also utilizing my experience in the game industry and with indie game projects to provide insights, design principles, problem solving skills, and game development management to create more attractive interactions and entertainment.