

Daryl Choa  
Creative Good Fund Proposal 2019  
Two Bit Circus Foundation

Dear Drew,

I am applying for the Creative Good Fund this summer to work with the Two Bit Circus Foundation. 2BCF is “a nonprofit educational organization designed to cultivate the next generation of inventors, advance environmental stewardship, and spur community engagement.” They are most well-known for their STEAM Carnivals, a traveling event that inspires inventors through reimagining carnival games through the lens of STEAM (Science, Technology, Engineering, Arts, and Mathematics). I believe that working for them this summer will not only contribute to my career growth, but will also enhance the public image of the ETC and help establish a relationship with an organization with similar aspirations to the ETC.

I am passionate about designing transformational interactive experiences that make STEAM learning engaging and accessible, and I believe the 2BCF is the place for me to accomplish this. I have been familiar with the organization since I was an undergraduate. For my senior thesis, I designed a sustainable after-school STEAM program that inspires interest in the sciences by encouraging creativity, communication, and collaboration. As part of my research, I interviewed Brent Bushnell, the founder of the organization. During my time as a Production Assistant at NOVA, I frequently referenced 2BCF’s models for engaging with the community through professional development workshops and building makerspace STEAM labs. Finally, ETC alumna Michelle Cohen, the Director of Creative Programming at 2BCF when I was seeking a career change, inspired me to apply to the ETC.

After visiting the Two Bit Circus (the for-profit side) during the West Coast Trip, I was put in touch with Justin Finuliar, the Director of Innovation at the Two Bit Circus Foundation (the non-profit side). We have been in discussions about the potential for a summer internship opportunity funded by the Creative Good Fund. They are very excited about the opportunity to work with a student from the ETC, because of my interdisciplinary background, passion for STEAM education, and familiarity with their organization.

This summer they will be preparing for STEAM Carnivals across the country in Los Angeles, Austin, and potentially Pittsburgh. While they will be showcasing some of their activations (redesigned carnival games) from previous STEAM Carnivals, they also plan on developing original pieces.

For this internship, I would independently develop at least one activation piece from concept to final build. This would be a physical installation piece that reimagines an old school carnival game with new technology. The piece would need to be portable and lightweight, with the ability to break down into pieces for travel. It would need to host many players and also have an educational component. They've also requested that the process be transparent, with an accompanying instructable that allows children to build a scaled version of the experience at home. Concurrently, I would work with the team to develop multiple activations for future STEAM Carnivals.

My experience in Building Virtual Worlds has prepared me for this challenge. I learned how to design for multiple platforms, build interest curves, and incorporate multiple players. During lightning round, I fabricated a standing see-saw out of wood to function as a controller for a game. During festival round, I created an experience that was just as amusing for players as for the audience with Chicken Run, a Kinect game that involves behaving like a chicken.

This semester, I am working on designing an experience for the Children's Museum of Pittsburgh that allows children to practice kindness. Concurrently, I am taking Experience Design with Ruth Comley. I have learned how to design experiences for multiple participants and how to think about throughput through an experience.

This experience at the 2BCF will allow me to develop skill sets in fabrication that I can then apply to projects at the ETC and in my future career. I am currently pitching for a student project with the Museum Lab (an extension of the Children's Museum of Pittsburgh) that will require a student with fabrication skills. These skills will also be relevant to my future career, since many exhibit designers need prior knowledge of fabrication. There are few classes available at CMU that will allow me to learn these skills, and there will potentially be the opportunity to be mentored by the corporate design fabrication team at Two Bit Circus. In addition, I will be seeking out additional mentors and workshops in the area as necessary.

Working for the 2BCF will not only benefit myself, but also allow for ETC work to be showcased nationally. As STEAM Carnivals travel across the country, the ETC will have representation at multiple events with thousands of participants. Hopefully, this will inspire the next generation of students to reimagine their STEAM education and to consider a career path through the ETC. In general, I hope that any work that I do can serve as a tool to help inspire students to pursue a career in STEAM. I care deeply about making STEAM education accessible to all students and I believe games are a great way to introduce students to the field.

As well, the 2BCF's philosophy fits in well with the ETC's philosophy of "learn, work, and play." The 2BCF reaches the next generation by reimagining classic games, and using them as a

tool to engage and educate; at the ETC, we reimagine experiences and build on the cutting-edge of technology. I believe a partnership between the two organization could be a fruitful one.

For this opportunity to “join the circus,” I would need a stipend to cover room and board, and living expenses for Los Angeles. I would also like access to my computer for the summer, and funding for supplies to build the activation (tools will be provided). It would also be beneficial to receive guidance from ETC faculty and alumni as I work on this project.

Thank you for your consideration for this wonderful opportunity. I look forward to hearing from you soon.

Thank you,  
Daryl Choa