

Project Title: Enhancing the Design Experience in 2nd Year Electrical & Computer Engineering Projects

Project Summary *(150 words maximum)*

Design is the core of engineering. In EECE, students develop a foundation for design in 2nd year and evolve those skills in subsequent years. However, the design experience may be stunted by difficulties associated with physical implementation. Students will not invest the time to learn a design tool if its output cannot be turned into a physical prototype.

The first phase of this proposal enabled students to turn an electric circuit designed with Altium into a PCB. This proposal addresses the related need to turn mechanical parts designed with SolidWorks into physical parts. Once complete, students will be able to fully implement electro-mechanical design projects which are the cornerstone of the 2nd year program. Giving them the confidence that they can build a prototype of literally anything they can dream up will unleash their creativity in subsequent years and raise their own expectations of themselves.