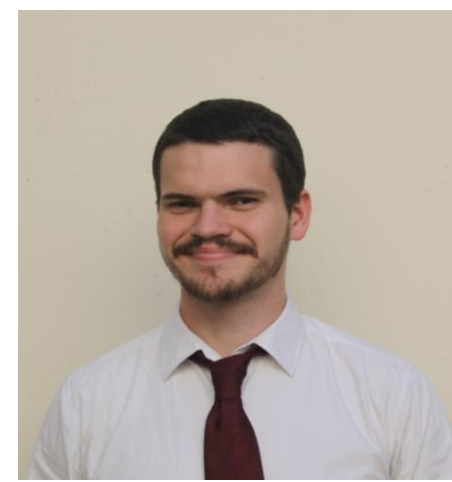


Meet the Team



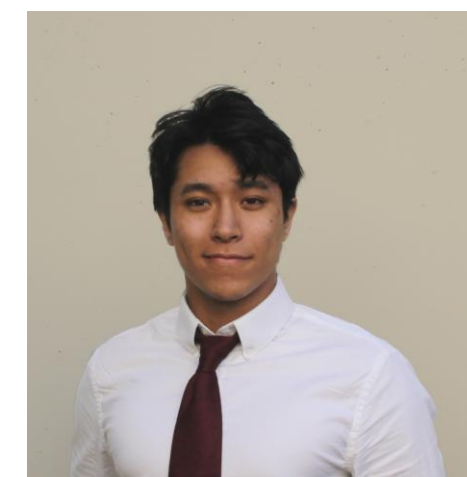
Collin Archer
Design Lead



Kimberly Telleson
Quality/Safety Lead



Jericho Raguine
Control Systems Lead



William Kim
Manufacturing Lead



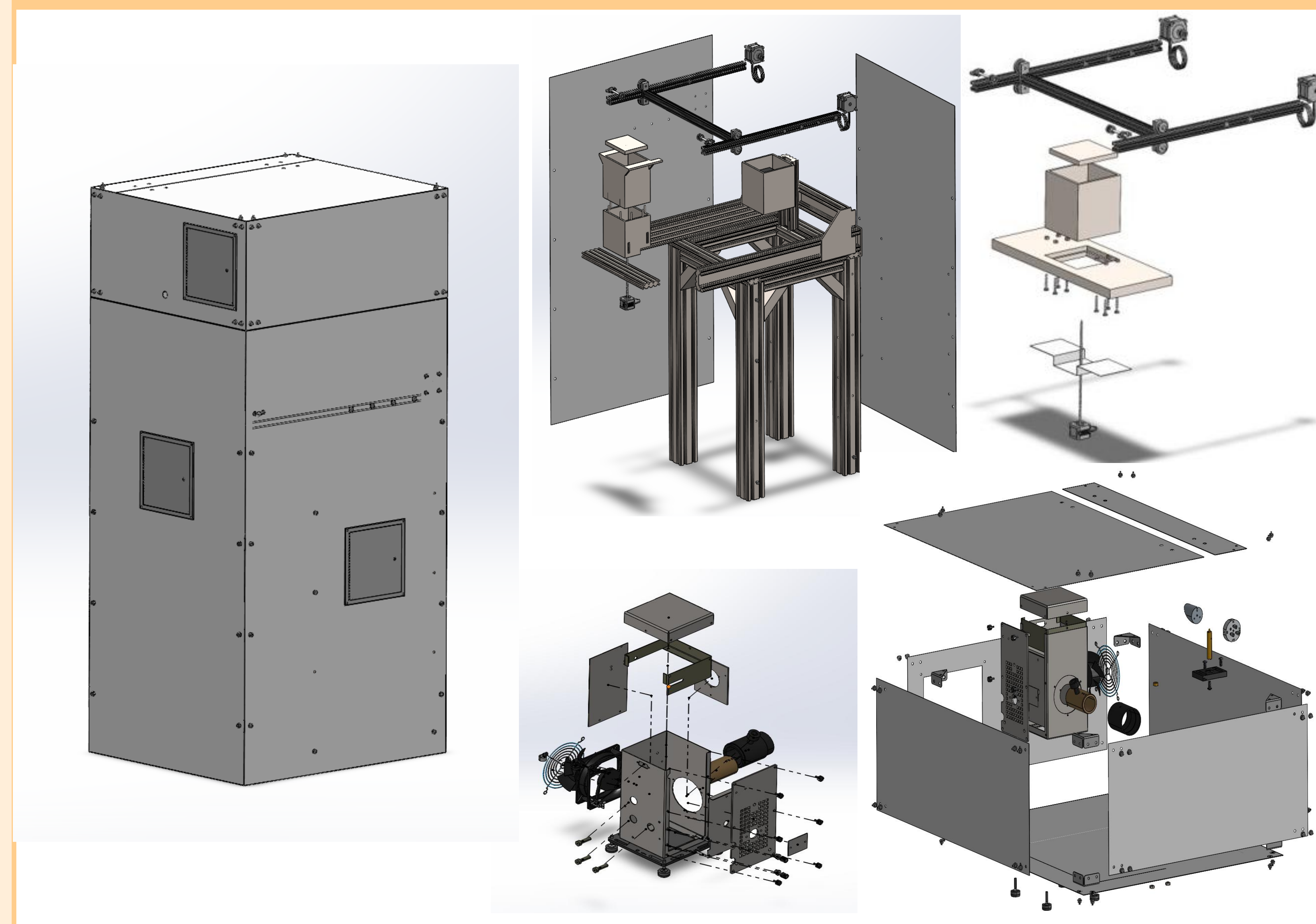
Justin Perry
Team Lead

Project Overview

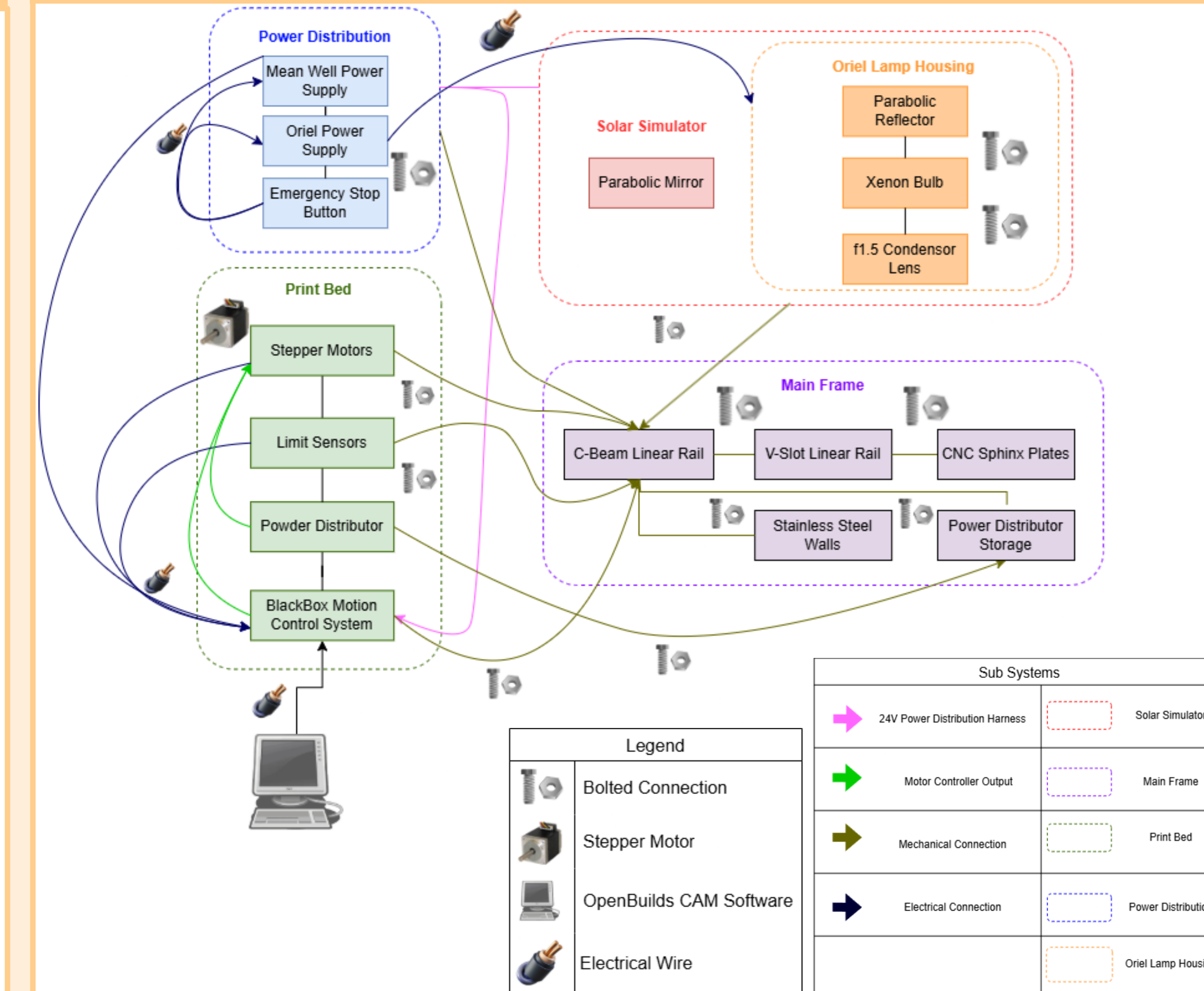
Problem Statement: The goal of this project was to combine the precision of 3D printing and the power of the sun. Using loose powders to produce solid parts by concentrating light to sinter the powder.

Concept: Sintering is a process that heats up powders causing them to fuse together into a solid structure. In our case a lamp and optics are used to develop a focused beam to sinter. After a layer of powder fuses, a series of motors moves the print bed to the powder distributor to receive a thin layer of powder then back to the beam

CAD Exploded View



System Level Diagram



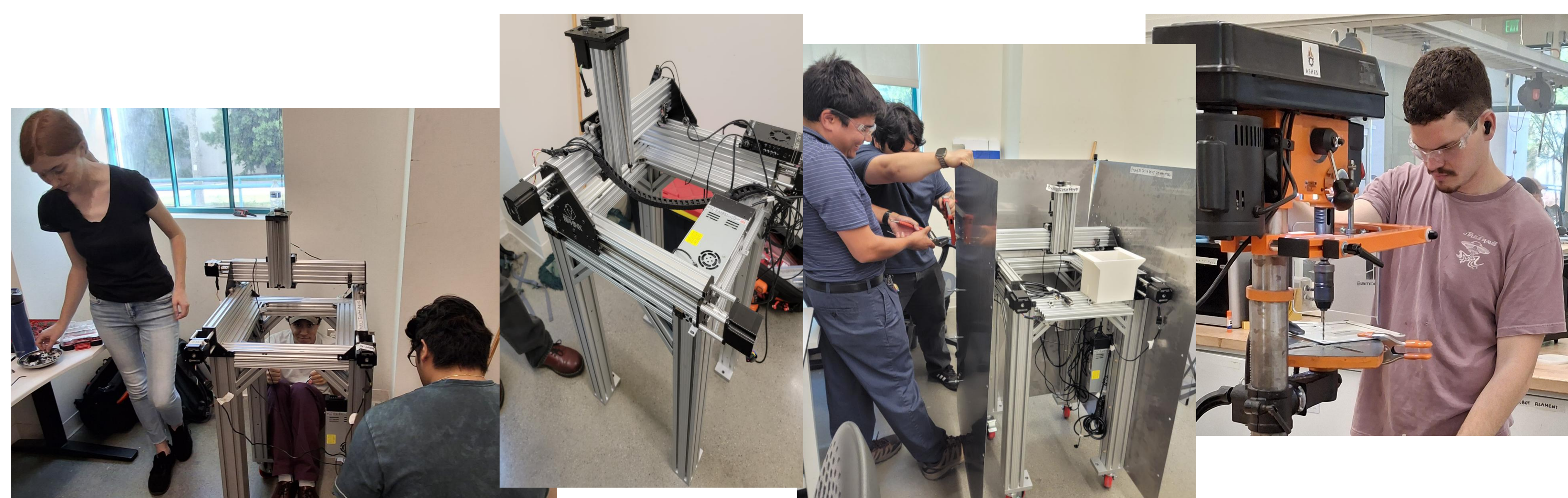
About our Sponsor

The Powder Technology Laboratory (PTL) is located here at SDSU, in the Department of Mechanical Engineering. PTL researchers are currently undertaking projects on various research topics including: Mathematical Modeling and Computer Simulations of Sintering Processes, Fundamental Experimental Investigations of Spark Plasma Sintering Process, and much more!

Scan the QR code to visit their website →



Manufacturing & Assembly



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