VASISHTA MALISETTY

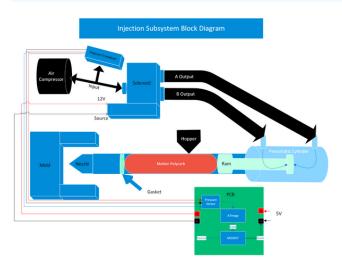
COMPUTER ENGINEERING AT NORTHEASTERN UNIVERSITY

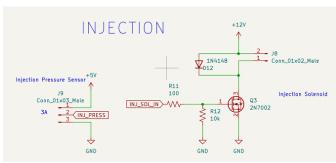
malisetty.v@northeastern.com

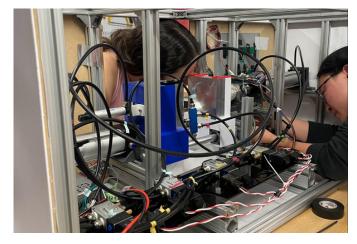
in linkedin.com/in/vmalisetty/

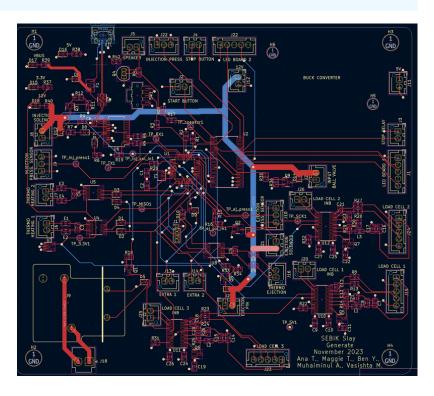
(724) 420 - 0353

AUTOMATED TABLE TOP INJECTION MOLDER (SEBIK)











What?

• Developed an automated table top injection molder seeking to provide a solution to medical supply shortages by rapidly producing common medical products on demand

How?

- Designed circuitry and PCBA for the injection ram subsystem using KiCAD
- Soldered components and wired peripherals on PCB
- Developed state machines and identified fault points in embedded code design using C++ and Git
- Conducted DFMEA on injection ram subsystem to identify, quantify, and reduce design risks

Results

• The design fulfilled its purpose by allowing 10.45 grams of molten polypropylene to be injected every 4 minutes via pneumatic cylinders