

# Casey Brown

Somerville, MA  
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Creative and focused mechanical engineer with experience and passion for start-to-finish mechanical design. Seeking a role championing a thorough design process with a culture focusing on innovation and success.

## SKILLS

- SolidWorks
- CATIA
- Rapid prototyping
- CREO Parametric
- AutoCAD
- FDM & SLA 3D Printing
- Material handling
- Rigorous documentation
- Photography

## EXPERIENCE

RightHand Robotics, Inc - Somerville, MA

February 2021 - May 2023

**Mechanical Integration Engineer** - Designed custom integration equipment to adapt a standard piece-picking robot into various non-standard workspaces

- Designed, documented, and implemented 15+ custom room-sized hardware assemblies using SolidWorks resulting in effective and easy-to-assemble permanent workspaces
- Developed top-level 500+ part assembly drawings, documentation packages, and work instructions for automated work cells for use by third party installers
- Created streamlined software procedures allowing the robotic arm to precisely avoid impacts with surrounding hardware automatically using SolidWorks
- Reassessed approved vendors and moved the majority of manufacturing to alternate vendors saving an average of 60% on custom parts and assemblies
- Developed training manuals for future employees, reducing onboarding time for new hires from weeks to days and holding current employees to documented drawing standards

Raytheon Technologies - Tewksbury, MA

May 2019 - February 2021

**Mechanical Engineer (Test Equipment)** - Implemented custom and off-the-shelf electronic equipment into rugged field assemblies

- Designed and documented 11 unique \$450,000+ electromechanical assemblies using CREO to house and protect delicate electrical equipment for testing radar and missile systems in the field
- Collaborated extensively with internal electrical engineers, trading requirements leading to successful field installations
- Followed extensive and strict DOD, ASME, ISO, and MIL-STD documentation processes and requirements to create clear and detailed mechanical drawings for 1,000+ part assemblies

Gorton's Seafood - Gloucester, MA

January 2018 - July 2018

**Project Engineering Co-op** - Assessed and corrected various mechanical issues across seven customized product lines producing and packaging frozen fish

- Diagnosed and designed custom solutions for procedural problems on various production lines, easing production and reducing ergonomic complaints from production line employees

## EDUCATION

Northeastern University - Boston, MA

May 2019

*Bachelor of Science in Mechanical Engineering*

## PERSONAL PROJECTS

Mechanical Keyboards

Designed, wired, and programmed multiple custom mechanical keyboards. This included designing and 3D printing cases and chassis around a PCB and key switches. Programmed with the QMK language designed for keyboards.