# Microgravity Press Washing Machine

Design Overview and Documentation

Contents

[Microgravity Press Washing Machine 1](#_Toc179665019)

[tiug 2](#_Toc179665020)

[Acknowledgements 2](#_Toc179665021)

# Design Overview

## Goals for Prototype

The purpose of this design is to demonstrate the function of this wash process in a non-flight-ready prototype. This design is made to reliably and accurately carry out the designed wash process and permutations of the wash process for exhaustive testing, validation of the process, and verification of limiting factors associated with this method. The built prototype will also conform to size and power constraints outlined to highlight compatibility for spacecraft environments.

## Working Principles

# Machine Drawings and Components

## Hardware

## Electronics

## Software

## Bill of Materials

## Testing

Tutorials Used

FreeCAD: <https://www.youtube.com/watch?v=8VPYTTnqmfs&ab_channel=DigiKey>

## Acknowledgements

This project took a lot of learning, perseverance, time, and help. A sincere thank you to everyone who helped in any capacity for me to see this through. I learned a great deal

Baltimore Hackerspace – Guidance and design support

Columbia University

Bob Kalbfell/IronHeart Welding

Dr. Florence Gold

Initial Project Contributors: Raymond Gerstner [high school teacher and supervisor], Daniel Clark, Ethan Vernon [group mates]