# Risk Assessment Mitigation Plan (RAMP)

# Autonomous Coffee Machine

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**Date: 11/6/2017**

**Revision 1 Date:**
**Revision 2 Date:**
**Revision 3 Date:**

| Component | Type of Risk | Assessment | Mitigation Plan |
|---|---|---|---|
| 3D printed carousel and mounting hardware | Unable to design a sufficient part | Very High | Build a single cup machine (worst comes to worst) |
| Coffee Reservoir | Unable to mount on machine | low | Mount it separately |
| Coffee Reservoir Sensor | Sensor reading reliability | low | Replace component if it causes problems |
| Water Reservoir Sensor | Sensor reading reliability | low | Replace component if it causes problems |
| Clean Filter Sensor | Sensor reading reliability | low | Replace component if it causes problems |
| Coffee pot sensor | Sensor reading reliability | low | Replace component if it causes problems |
| Raspberry Pi 3 | Damage or failure to operate | low | Replace |
| Carousel Motor | Damage or failure to operate | low | Replace component if it causes problems |
| Control software | Reliability | low | Write better code |
| User Interface | Unable to host on server | medium | Deal with it and only able to access it via my house LAN |
| Pot Warmer | Unable to turn off after an hour | medium | Must overcome |
| Power Supply | Damage or failure to operate | medium | Must overcome |