

Risk ID	Risk Description	Risk Category	Risk Probability	Risk Impact	Performance Indicator	Responsible Party	Action Plan
HW1	Board Failure	External/Internal, Technical, Parts	10%	H	The Board ceases to function, has reproducible failures, has visible damage	Trevor: handle consistently and carefully, note and communicate changes in behavior, note state upon receipt	Avoid: board will need to be reexamined and possibly redesigned if cause was not observable (physical damage, misuse)
HW2	Sensor Failure	External/Internal, Technical, Parts	40%	L	A sensor ceases to function, has reproducible failures or inconsistencies, or has significant visible damage	Ash, Jacob: handle consistently and carefully, note and communicate changes in behavior, note state upon receipt.	Retain: Keep an eye on sensor outputs and handle with care, but existing documentation and experience suggests that this is bound to happen, and impact is low
HW3	Sensor Spec Failure	Internal, Technical, Documentation	30%	L	A sensor does perform to it's expected spec/ the spec was misunderstood by team members	Ash, Jacob: read and research part specs thoroughly before purchasing, ensure that the spec is well understood	Reduce: Ensuring that parts are vetted before purchase will reduce the likelihood of this occurring, and the impact severity if it does occur
A1	Parts Delay	External, Timeline	50%	M	A part arrives later than expected or is initially out of stock	Jacob, Trevor: order parts well in advance	Retain: move timeline if required
C1	Budgeting	Internal, Cost	35%	L	Parts required to meet spec are too expensive, or unexpected failures cause unforeseen replacement costs	Ash, Jacob, Trevor: budget out costs in advance to catch budgetary roadblocks early	Transfer: notify project partner and course instructor, request situational budget increase depending on source of cost
SW1	Data readability Failure	Internal, Software	20%	M	Logged data is unreadable by or inconvenient for CS team to process	Trevor: ensure communication and cooperation with CS team on data storage, data logging	Transfer: Work with CS team to reach a middle ground/ help understand data Reduce: collab with CS team
SW2	Software Compatibility Failure	Internal, Software	15%	M	CS team's programming and data vis is incompatible with hardware setup/data logging and transfer	Jacob: Ensure communication between teams on current platforms, verify and track compatibility in specs	Reduce: consistent communication with CS team, regular meetings to discuss format of data, hardware medium specifics, and data visualization
SW3	Code bugs and updates	Internal, Software, Programming	90%	L	Code does not work as it did before, fails	Ash: verify and track firmware updates, communicate with CS team	Retain: this is expected and is part of the development process
D1	Reproducibility Failure	Internal, Documentation	15%	H	Documentation for a project component is missing/out of date and needed to reproduce that project component	Ash, Jacob, Trevor: Document each and every step of project components	Reduce: Examine related documentation to recreate the missing or out of date documentation

