

**MASTER OF SCIENCE IN MANAGEMENT AND SYSTEMS**

**Applied Project Capstone**

**MASY GC- 4100**

**MEMORANDUM**

TO: Dr. Andres Fortino

FROM: Chongyuan Liu

DATE: Nov 5, 2023

RE: **Assignment 7 – Risk Management Plan**

**Project**

**RoboScale: Research paper on LLM-Driven Robot Replaceability Assessment Tool**

**Risks**

|  |  |  |  |
| --- | --- | --- | --- |
| **Number** | **Risk** | **Probability Score (1,2 or 3)** | **Impact Score (1,2 or 3)** |
| 1 | Technical Complexity and Tool Development Challenges | 2 | 3 |
| 2 | Validation and Accuracy Assessment Difficulties | 2 | 3 |
| 3 | Research Paper Development Delays | 2 | 2 |
| 4 | Project Management and Coordination Issues | 2 | 2 |
| 5 | Dependencies and Third-Party Collaborations | 2 | 2 |

**Risk Matrix**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | RISK (exposure) | | | |
| Probability (of occurrence) |  | 1.Slight | 2. Moderate | 3. High |
| 1. Very Unlikely |  |  |  |
| 2. Possible |  | 3,4,5 | 1, 2 |
| 3. Expected |  |  |  |

**Contingency Plan**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Risk | Description | Probability (1-3) | Exposure (1-3) | Contingency Plan |
| 1 | Technical Complexity and Tool Development Challenges | 2 | 3 | Develop a modular approach to building the tool to isolate complexities, ensuring parts of the tool can progress without being hindered by others. Invest in additional research and development resources to address technical challenges as they arise. |
| 2 | Validation and Accuracy Assessment Difficulties | 2 | 3 | Establish a clear validation framework with input from multiple experts to ensure diverse perspectives on accuracy. Plan for additional rounds of validation and involve the sponsor in early stages to confirm the validation approach is sound. |
| 3 | Research Paper Development Delays | 2 | 2 |  |
| 4 | Project Management and Coordination Issues | 2 | 2 |  |
| 5 | Dependencies and Third-Party Collaborations | 2 | 2 |  |