New York University
MS in Management and Systems
Applied Project
Project Sponsor Agreement

Goals of the Program

For Participating Organizations

- Begin relationship with New York University
- Receive help from highly trained NYU graduate student
- Provide internship opportunity for NYU graduate student
- Receive assistance at no cost

For NYU Graduate Students

- Manage and implement a meaningful project aligned with their professional and educational goals
- Hands-on experience interacting with a start-up or operational small business or organization
- Earn credit toward completion of graduate degree by conducting an unpaid Applied Project under the mentorship of an NYU-SCPS professor.

Project Sponsor and Student Responsibilities

- Student prepares project planning documents
- Sponsor reviews and approves student's project plan
- Student submits project plan to faculty supervisors for approval
- Student conducts project according to plan
- At predetermined milestones sponsor reviews and approves status reports submitted by student
- Status reports reviewed and evaluated by faculty supervisors to assure student effort and project meet course requirements
- Project sponsor and student participate in periodic project reviews with NYU
- At project completion project sponsor completes evaluation forms
- Student prepares final report

Project Selection Process

- Project Evaluation Committee reviews proposed projects
- Projects are:
  - Relevant to MS degree course content
  - Significant to the participating organization
  - Substantial in terms of duration and scope
  - Challenging to the student
  - Capable of being measured against predetermined goals

The MS in Management and Systems

Concentrations in:

- Strategy and Leadership
- Systems Management
- Database Technologies
- Enterprise Risk Management

Typical Participating Student Profile

- Students selected to participate in this program meet stringent criteria
- Have completed all coursework
- High achievers with highest level GPAs and strong academic credentials
- 2-10 years of business experience

- Highly motivated for success

Sponsor and Project Information

Type of Organization	☐ For Profit ☒ Not for Profit						
Name of Organization	NYU SPS MS Management and Systems program						
Address	7 East 12Th Street, NY, NY						
City	New York	State	New York	Zip	10003		
Project Sponsor	First Name	Andres	Last Name	Fortino			
Title	Clinical Associate Professor, NYU						
Phone							
Email	agf249@nyu.edu						
Web Site	https://www.linkedin.com/in/afortino						
Type of Business	New York-based learning institution						

Student Name	Chongyuan Liu
Project Title	RoboScale: LLM-Driven Robot Replaceability Assessment Tool

Description of Project	
Research paper on Using LLM for Development and Validation of a Robot Replaceability Scale Tool for Business Reengineering Analysts: Leveraging O*NET Data Set and the Goldman Sachs scale	
Estimated Hours of Student Participation	300 hours

Anticipated Results

1. **Comprehensive Tool**: A fully developed and user-friendly Robot Replaceability Assessment Tool, named "RoboScale", powered by LLM, that can evaluate the feasibility and complexity of replacing human tasks with robotic solutions. This tool will simplify the assessment process by eliminating the need for complex programming or algorithmic adjustments.
2. **In-depth Documentation**: A thorough documentation outlining the step-by-step process of building the tool, ensuring that the process is replicable for similar future endeavors. This documentation will serve as a reference for those who want to understand the inner workings of the tool or adapt it for further improvements.
3. **Validation Report**: A detailed report showcasing the results of the tool's validation. This will include comparisons between the tool's predictions and expert opinions, highlighting its accuracy and areas of improvement.
4. **Research Paper**: A well-structured research paper ready for submission to the IEEE conference. The paper will cover the methodology of using LLM to create the

replaceability tool, the challenges faced, solutions adopted, and the potential impacts on the field of business reengineering.

5. **Accessible Repository**: All project deliverables, including the tool, documentation, validation results, and the research paper, will be made available on a public Github repository. This ensures transparency, accessibility, and the possibility for collaboration or further development by the broader community.
6. **Increased Efficiency for Analysts**: With the implementation of the "RoboScale" tool, business reengineering analysts will be better equipped to make informed decisions about task automation. This efficiency could lead to more effective reengineering processes and potential cost savings for businesses.
7. **Recognition of NYU and Dr. Andres Fortino**: Given the innovative approach of this project and its potential benefits, NYU and Dr. Andres Fortino may gain recognition in the academic and industry spheres, further establishing their authority and expertise in the domain.

Knowledge and expertise student will need to be able to complete the project
The development of a Robot Replaceability Scale Tool using LLM encompasses a diverse range of disciplines within the MS Program. The areas of study that will be instrumental in planning and conducting the project include: 1. Data Science and Analytics: Leveraging data science techniques for analyzing the O*NET dataset and deriving insights. Applying statistical methods and machine learning algorithms for tool development and validation. 2. Artificial Intelligence and Machine Learning: Understanding and implementing Large Language Models (LLM) for the development of the replaceability scale tool. Exploring techniques in natural language processing and understanding to enhance the tool's capabilities. 3. Management Information Systems: Learning about the practical application of information technology in solving business problems. Integrating the knowledge of IT systems and management to ensure the tool aligns with business reengineering analysts' needs. 4. Project Management: Employing project management principles and best practices for planning, executing, monitoring, and closing the project. Utilizing project management tools and techniques to ensure timely delivery of deliverables. 5. Human-Computer Interaction: Designing user interfaces and experiences that make the tool user-friendly and effective. Understanding the interaction between humans and computers to optimize the tool’s usability. 6. Ethics in Technology and Data: Ensuring ethical considerations are adhered to, particularly regarding data privacy and usage. Navigating the ethical implications of replacing human tasks with robots. 7. Business Strategy and Operations: Understanding how the tool can be integrated into broader business strategies and operations. Exploring how automation and robotics can impact and improve business processes and efficiency. 8. Research Methodology: Applying research methods for literature review, data collection, analysis, and validation. Writing and presenting the research paper according to IEEE conference paper standards. By leveraging the knowledge and skills acquired in these areas of study, the project will be well-positioned for success, ensuring a comprehensive approach to developing a robust and effective Robot Replaceability Scale Tool.

Will the project sponsor be available for periodic meetings with NYU to review progress, address questions and concerns with the professor supervising the program? *This is a requirement for the program*	☐ Yes ☐ No

Describe the form and frequency of supervision of the student by the Project Sponsor.

Weekly meetings will be scheduled for project progress reporting and eventual issues resolutions.

Sponsor Agreement

Students are interns, not professional consultants. NYU is not responsible for the outcomes of projects undertaken by students. Work is on a best-efforts basis; no guarantees or warranties are expressed or implied. Organization is responsible for evaluating work presented, determining its value and whether to use it or not. Some projects may require on-going management or even re-work by the Organization after the student completes their Applied Project.

Please note that in order to post an unpaid position, the internship must encompass all 6 components below:

1. The internship, even though it includes actual operation of the facilities of the employer, is similar to training which would be given in an educational environment;
2. The internship experience is for the benefit of the intern;
3. The intern does not displace regular employees, but works under close supervision of existing staff;
4. The employer that provides the training derives no immediate advantage from the activities of the intern; and on occasion its operations may actually be impeded;
5. The intern is not necessarily entitled to a job at the conclusion of the internship; and
6. The employer and the intern understand that the intern is not entitled to wages for the time spent in the internship.

I have read and agree with the information shown in the Terms and Conditions for employers contained on the following web page(s): http://www.nyu.edu/life/resources-and-services/career-development/employers/post-a-job/terms-and-conditions.html

Please complete and sign this form in the space provided below and return to the course professor via the student who will upload the document to the course drop-box. For any questions, please email the professor: Prof. Israel Moskowitz im36@nyu.edu.

I agree to all of the above

Participating Organization _NYU SPS Masy program___ Date Oct 4,2023

By (signature): Andres Fortino
Project Sponsor

Printed Name: _Andres Fortino_____

Title: __ Clinical Associate Professor, NYU _SPS MASY Program_____

Student Agreement

Students who are planning to conduct an unpaid Applied Project must read and agree to the "Important Considerations Before Accepting a Job or Internship" contained on the following web page(s): http://www.nyu.edu/life/resources-and-services/career-development/find-a-job-or-internship/important-considerations-before-accepting-a-job-or-internship.html.

Students do not register their Applied Project with the Wasserman Center.

I agree to the all of the above

Student Name (Print) _Chongyuan Liu_____ Date __Sep 28, 2023_____

Signature: