Community Internship Collaboration Business Proposal
Spring, 2020

Organization name	ErgoTech Systems, Inc.
Mentor/Contact name	Elizabeth Cooper/Jim Redman
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Organization website	http://www.ergotech.com
Describe your organization	ErgoTech develops and sells software for manufacturing and factory automation.
Internship title	Virtual Automation HMI Designer
Specific days/hours (if applicable)	Flexible
What will the student learn from the internship?	Overview of manufacturing and factory automation screen creations. Concepts of data visualization and advanced HMI design.
What does your business need that a student intern can impact?	We need to create samples and examples of visualization and logic components for use within our MIStudio product. These will be added to a Wiki so that they will be available for ErgoTech customers.
What project(s) will the intern work on?	MIStudio has recently been integrated with Apache Echarts which provides very advanced data visualization. The intern should create some simple-to-follow example but also, if possible some complex demos/examples – some eye-candy for presentations and similar. MIStudio connects smoothly with Amazon's AWS to provide Cloud-based data collection, so deploying/testing in the Cloud could be part of the project. MIStudio links with Apache Spark for analytics and machine learning. This is largely drag-and-drop but again, needs some simple to follow examples.
What skills are required for this internship?	Basic computer skills including the concepts (not details) of networks or the web. A rudimentary understanding of and interest in data science such as understanding precision vs accuracy, correlation vs random, scaling and ranges for visualization.
What final deliverables will the student produce?	The intern will have created projects for MIStudio, especially Echarts examples, which will be documented and posted on our technical support wiki. The right candidate could create an end-to-end IOT/Data Collection, Analysis and Visualization sample or a subset depending upon the candidate's skill level.

How would you describe the primary purpose of this project? (Select one)	_X_Computer Science/IT __Science (Biology, Chemistry, Environmental) __Marketing/Communications __Project Management __Accounting/Finance __Other
If "Other", please specify	Click here to enter text.
Any additional information you would like to share?This is a "creative" task, that is, we expect that the intern will be self-motivated with initiative ane be able work by themselves but to ask questions/ask for help when stuck.	This is a "creative" task, that is, we expect that the intern will be self-motivated with initiative and be able work by themselves but to ask questions/ask for help when stuck. We expect to guide rather than direct and hope the intern will come up with better ideas, design, and samples than we might even if they are based on our suggestions.