UP CRC 2021 Robotics Ideathon Scoresheet

| Team No. : | |
|--------------|--|
| Judge No. : | |
| Final Score: | |
| · | |

| Team Members: | |
|-----------------------|--|
| Proposal Name: | |

| Rubric | High Score | Medium Score | Low Score | Notes | Weight | Score |
|---------------------|--|---|---|---|--------|-------|
| Hardware Design | | | | | | |
| Feasibility | The authors have shown with sufficient proof that their design can solve the given problem and that their design can be implemented in real life. | The authors have shown that their design can solve the given problem, but have not provided sufficient proof that their design can be implemented in real life. | The authors have not shown why their design can solve the given problem, nor have shown proof that their design can be implemented in real life. | Simulations and calculations are NOT required but can weigh in heavily towards scoring. | 50 | |
| Cost | The authors have provided an accurate cost estimate within a reasonable amount for the capabilities of their design. Most of their components are sourced locally or are easily available online. | The authors have provided an accurate cost estimate but their cost is excessive for the capabilities of their design. Many of their components are hard to source. | The authors were not able to provide an estimate as to the cost or sourcing of components for their design. Alternatively, their estimated cost is prohibitively expensive or most of their components are hard to source. | | 30 | |
| Innovation | The idea is unique, or has only been done by a few people. | The idea has already been done before, but the authors have added their own twist to it. | The idea is repetitive, or has already been done by many people in the past. | | 20 | |
| Ease of Fabrication | The authors have a clear idea on how to fabricate | The authors have a vague sense of how to | The authors have no clear idea how to fabricate their | | 20 | |

| | their design. The methods listed are enough to produce without further work. | fabricate their design, but not detailed enough to produce without further work. | design. | | |
|-------|--|---|---------|-----|--|
| Total | | | | 120 | |

| Rubric | High Score | Medium Score | Low Score | Notes | Weight | Score |
|-----------------------------|--|---|---|--|--------|-------|
| Software Design | | | | | | |
| Correctness | The provided algorithm has the correct behavior for all cases in theory, including possible edge and corner cases. | The provided algorithm has the correct behavior for most cases in theory, but fails on some edge or corner cases. | The provided algorithm does not have the correct behaviour for the given problem. | This category only accounts for theoretical performance. | 15 | |
| Resilience | The algorithm can account for most possible non-idealities, only failing in extreme conditions. | The algorithm can account for some non-idealities, but can fail in certain common conditions. | The algorithm only works in ideal conditions. | | 15 | |
| Appropriateness to Hardware | The algorithm makes full use of all included hardware and the properties of the design. | The algorithm makes use of included hardware and design, but does not use them to their full potential. | The algorithm does not make sense with the given design. | | 30 | |
| Total | | | | | 60 | |

| Rubric | High Score | Medium Score | Low Score | Notes | Weight | Score |
|-----------------------|---|---|--|-------|--------|-------|
| Documentation Writing | | | | | | |
| Completeness | The documentation is enough to construct the design in reality. | Assumptions need to be made to construct the design in reality. | The documentation is too vague to construct the design in reality. | | 20 | |

| Understanding | The documentation is easy to understand, even for those without technical knowledge. | The provided documentation is understandable, albeit with some effort needed for those without technical knowledge. | The documentation is full of technical jargon and terminology and is difficult to understand. | | 20 | |
|---------------|--|---|---|------------------------------------|----|--|
| Clarity | The documentation is clear in its meaning. | There are some aspects of the documentation that are vague or unclear. | The documentation is vague and unclear. | | 20 | |
| Organization | The documentation is laid out in an organized manner and a reasonable format. | The documentation is readable, but improvements could be made to its organization. | The documentation is haphazardly put together, with formatting that is disjointed and hard to read. | Dock points for missing citations. | 20 | |
| Total | | | | | 80 | |

| Rubric | High Score | Medium Score | Low Score | Notes | Weight | Score |
|--------------|---|--|--|-----------------|--------|-------|
| Presentation | | | | | | |
| Conciseness | The presenters can deliver all information needed within the time limit. | The presentation contains most of the information needed but is rushed. | The presentation is clearly cut off and missing key information. | | 20 | |
| Delivery | The presenters deliver all information in a professional manner that is easy to understand. No member is "hogging" the content of the presentation. | The presenters deliver the information in a somewhat professional manner that is somewhat understandable. The members take turns presenting. | The presenters fail to deliver in a professional manner and are hard to understand. Only some or even just one of the members are even presenting. | | 20 | |
| Organization | The presentation is laid | The presentation is | The presentation is | Dock points for | 20 | |

| | out in an organized manner. The visual aids are easy to read and appropriate to the presentation. | somewhat organized. The visual aids are readable and somewhat appropriate to the context. | haphazardly put together. The visual aids are hard to read or inappropriate for the context. | missing citations. | | |
|---------|---|--|---|--------------------|-----|--|
| Content | The ideas in the presentation are given in a clear manner. | The ideas in the presentation are given in a somewhat clear manner. | The ideas in the presentation are given in a vague manner. | | 20 | |
| Mastery | The presenters demonstrate that they understand their design. They can answer questions without problems. | The presenters demonstrate some understanding of their design. The presenters can answer some but not all questions. | The presenters fail to demonstrate their understanding of the design. They have difficulty answering all questions. | | 20 | |
| Total | | | | | 100 | |

| Grand Total | | | | 360 | | |
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