**CAPABILITIES DOCUMENT**

Project: Design an Autonomous Robot

Task: To design an autonomous robot that is capable of navigating to a predetermined position while avoiding obstacles and firing objects at two targets. This is to be done in the shortest time possible.

Document Version Number: 2

Date: March 13th, 2015

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**TEAM MEMBERS**

|  |  |  |
| --- | --- | --- |
| Name | e-mail | phone |
| Eric Vuong | eric.vuong@mail.mcgill.ca | 514-561-1337 |
| James Fuh | shih-hao.fuh@mail.mcgill.ca | 514-447-2026 |
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| Gwyneth Pang | chung.pang@mail.mcgill.ca | 514-627-6052 |
| Adrian Pan | ziyi.pan@mail.mcgill.ca | 778-995-6239 |
| Yutian Zheng | yutian.zheng@mail.mcgill.ca | 514-562-7126 |

**CAPABILITIES**

|  |  |
| --- | --- |
| Name | Relevant Experience and Interests |
| Eric Vuong | -Enjoy coding, testing and seeing results. -Have been in a robotics team in CEGEP.  -Know Java programming language and object oriented-programming. |
| James Fuh | Have basic coding skills in Java, C, and MIPS |
| Yu Chen Xu | -Knows Java language and basic C programming.  -Currently in McGill Robotics’ electrical division.  -Interested in learning Android App Development. |
| Gwyneth Pang | -Basic Java language  -Enjoys scheduling  -Currently in McGill EV team |
| Adrian Pan | -Basic Java, C and Assembly language  -Currently in McGill Robotics Electronics |
| Yutian Zheng | -Basic Jave, C language  -good at hardware, designing a robot |

**POSSIBLE APPLCATION AREAS**

|  |  |  |
| --- | --- | --- |
| Name | Main Roles | Subtasks |
| Eric Vuong | -Software Design: Responsible in designing the code and  -Project Manager: Ensure that deadlines are met for every tasks and separation of tasks for each member. | -Sketch and try to find solutions to the robot’s design  -Help hardware team and contribute to testing |
| James Fuh | -Software Design:  Write and edit the code. Help on debugging if there are errors on the code. | -Provide a rough sketch of the robot |
| Yu Chen Xu | Mechanical design:  Design the robot’s hardware look. | -Help software team if needed.  -Contribute to the documentation. |
| Gwyneth Pang | Documentation: General assembly of documents and records, and final edits | Mechanical Design:  Help with mechanical aspect of the robot |
| Adrian Pan | Software Design: Responsible for localization part of coding | -Provide assistance on other parts of coding |
| Yutian Zheng | Hardware-- design the robot. | -Help with documentation  coding |

**AVAILABILITY**

Eric→ availability: Thursday 1pm-4pm, Fridays afternoon, Wednesdays afternoon and 1 day can be allocated to project on weekend. No major date besides Tuesday and Friday of next week (midterms).

James→ Availability: Thursday from 8am-12pm & 2-3pm, Friday from 9:30am-1pm & 2:30pm - midnight, weekends 24/7

Yu Chen→ Availability: Monday after 3:30pm, Tuesday after 1pm, Wednesday after 6:30pm, Thursday 8-11:30 and 1-4, Weekend, free sometimes on Saturday, but preferably Sunday after 3pm.

Gwyneth→ Availability: Monday: 3:30 to 6, Tuesday: after 1, Thursday: 1 to 4, Friday: after 12:30, Weekends: Generally all day

Adrian → Availability: Monday 3:30 to 5, Wednesday 3:30 to 5. Thursday: after 11:30

Yutian → Availability: Monday Tuesday Thursday Friday: 3:30 to 6

Every week, there will be a team meeting on Thursdays at 1pm. The meeting with the TA will be on Mondays at 9:40am. Finally, the weekly meetings with the professor will be at 10:40am on Mondays.

**GLOSSARY OF TERMS**