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# TASK DIAGRAM

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HOW TO SUBMIT: PLACE A PDF DOCUMENT WITH THE LINK/TITLE “BACKGROUND RESEARCH ASSIGNMENT” IN YOUR GROUP’S RESOURCES FOLDER AND MAKE A LINK TO THIS ON YOUR GROUP’S WIKI PAGE. YOUR PAGE MUST BE READABLE ON A WEB BROWSER. WHAT TO SUBMIT: TWO-PAGE PAPER PER GROUP, FORMATTED AS SPECIFIED BELOW.

YOU ARE TO GATHER, SUMMARIZE, AND ANALYZE EXISTING WORK ON YOUR PROJECT TOPIC. THE PURPOSE OF THIS ASSIGNMENT IS FOR YOUR GROUP TO OBTAIN A THOROUGH PICTURE OF WHAT DESIGN APPROACH HAVE BEEN EXPLORED AND THE ISSUES THAT HAVE ARISEN. YOUR PAPER SHOULD REFLECT THIS UNDERSTANDING SO THAT IT CAN BE A STARTING POINT FOR YOUR OWN PROJECT DESIGN. YOUR PAPER SHOULD NOT BE A SERIES OF SUMMARIES NOR SHOULD IT BE A LIST OF WHO HAS DONE WHAT.

YOUR PAPER SHOULD INCLUDE A LIST OF REFERENCES AT THE END FOR ANY MATERIAL DISCUSSED IN THE PAPER. YOUR PAPER SHOULD BE IN 12 PT FONT, SINGLE-SPACED, WITH 1” TOP, BOTTOM, LEFT, AND RIGHT MARGINS.

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[ECE 4534] EMBEDDED SYSTEMS DESIGN  
*Virginia Polytechnic Institute and  
State University*



**ARM**

**Sensors**

**Motor**

## **References**

- [1] Rodney A. Brooks. A robust layered control system for a mobile robot. Technical report, Massachusetts Institute of Technology, Cambridge, MA, USA, 1985.
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- [4] Google. Protocol buffers, 2014.
- [5] R. A. Hogle and P. P. Bonissone. A fuzzy algorithm for path selection in autonomous vehicle navigation. *The 23rd IEEE Conference on Decision and Control*, pages 898–900, 1984.
- [6] Buniyamin N., W. A. J. Wan Ngah, N. Sariff, and Z. Mohamad. A simple local path planning algorithm for autonomous mobile robots. *International Journal of Systems Applications*, 2011.
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