LAB 5 – VELOCITY CONTROL OF A DC BRUSHED MOTOR

University of New Hampshire

30. November 2017

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***VELOCITY CONTROL OF A BRUSHED DC MOTOR***

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| **Course Number and Name:**  ME 747 – Senior Lab | |
| **Semester and Year:**  2017 semester 2 | **Name of Lab Instructor:**  **Alireza Ebadi** |
| **Lab Section and Meeting Time:**  2b 14:00 | **Report Type:**  **External Group Report** |
| **Title of Experiment:**  **Velocity Control of a DC Brush Motor** | |
| **Date Experiment Performed:**  14. November 2017 | **Date Report Submitted:**  1 December 2017 |
| **Names of Group Members:**  Jesse Feng Simon Popecki Reilly Webb | **Grader's Comments:** |
| **Grade:** |

# Cover Letter

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Dr. Ebadi,

The following document contains an analysis of control systems for a DC brushed motor. DC motors are generally controlled via pulse width modulation and a microprocessor, however for the purpose of demonstration, we controlled DC motors with power op-amp driven proportion control, integral control, and proportional-integral control.

These control systems were compared against each other in terms of functionality- the motor parameters have been determined through experimentation.

The body of this report comprises of the results of inputs to the system and recorded system response.

Best Regards,

Jesse Feng

Simon Popecki

Reilly Webb

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