

## EECE 360 Homework - Block Diagrams

- 1) For the system in E2.9:
  - Compute the transfer function for both outputs,  $F_f$  and  $F_r$ .
  - Write the transfer function of the SIMO system in matrix form.
- 2) For the system in E2.12:
  - Compute the transfer function for both inputs,  $T_d$  and  $R$ .
  - Write the transfer function of the MISO system in matrix form.
- 3) For the system in E2.13:
  - Compute the transfer function for both inputs  $R_1$  and  $R_2$ , and both outputs,  $Y_1$  and  $Y_2$ .
  - Write the transfer function of the MIMO system in matrix form.
- 4) For the system in P2.2:
  - Compute the transfer function for both outputs,  $y_1$  and  $y_2$ .
  - Write the transfer function of the SIMO system in matrix form.
- 5) For the system in P2.3:
  - Compute the transfer function for both outputs,  $v_1$  and  $v_2$ .
  - Write the transfer function of the SIMO system in matrix form.
- 6) Compute the 2x2 Transfer Function for the following MIMO system.

