

## Linear Regression for Business Statistics

**Interaction Effects in a Regression Model.** (Height and Weight.xlsx)

$$Weight = \beta_0 + \beta_1 Male + \beta_2 \overline{Height} + \beta_3 Male * \overline{Height}$$



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Example: Salaries at workplace.

Ques: How do years of experience differently impact salary for male and female employees?

- Interaction between '*Years of Experience*' and '*Gender*' needed.

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- Could also have a three way interaction by interacting 3 variables



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