

Question 8.1

Describe a situation or problem from your job, everyday life, current events, etc., for which a linear regression model would be appropriate. List some (up to 5) predictors that you might use.

At work, we often have to measure the degradation of output of our solar panels over time. The output of these panels has a clear linear trendline. Some predictors that affect the panels output could be:

- I. **Type of panel (thin film, poly silicon, mono silicon)**
- II. **Weather conditions of the area (hot, cold, more sunny, more rainy, etc)**
- III. **Vegetation growth (does the grass grow fast/tall and cover bottom edges of the panels)**
- IV. **Soiling in the area (pollen, dirt, dust etc.)**
- V. **Shading of the panels (any poles, trees or etc around that could shade the panels?)**