EXPERIMENTAL DESIGN 1

# Project Name (Experimental Results)

First Student, Second Student, Third Student

Activity Report

### 1 RESEARCH QUESTION

# 2 EXPERIMENTAL RESULTS

Show the following results of your system.

- 1) Stress-strain curve for latex glove (See Figure 1).
- 2) Stress-strain curve for nirile glove (See Figure 2).
- 3) Table summarizing key metrics (Young's Modulus and Ultimate Tensile Strength) derived from stress-strain curves compared to known values from the original research paper (See Table 2).

Include text here that references the graphs and the table. Your text should provide some context and allow the reader to understand what they are looking at.

#### INSERT GRAPH HERE

stress-strain curve for the latex glove. Graph must use data that was generated from your system. Make sure it is properly labeled and easy to read.

Figure 1. Stress-strain curve derived from our system for Latex glove sample

#### 3 DATA ANALYSIS

- Name of first Student. 12222, E-mail: student1@albany.edu,
- Name of second Student. 12222,
   E-mail: student2@albany.edu,
   Electrical & Computer Engineering, University at Albany.

## **INSERT GRAPH HERE**

stress-strain curve for the nitrile glove. Graph must use data that was generated from your system. Make sure it is properly labeled and easy to read.

Figure 2. Stress-strain curve derived from our system for nitrile glove sample

2 EXPERIMENTAL DESIGN

Metric	Sample	# Trials Our System		Known Value	Error
Young's Modulus	Latex Glove	?	?	$740 \pm 10 \text{ kPa}$	±?
	Nitrile Glove	?	?	$2.4 \pm 0.2 \text{ MPa}$	±?
Ultimate Tensile Strength	Latex Glove	?	?	$3.3 \pm 0.1 \text{ MPa}$	±?
	Nitrile Glove	?	?	$4.4 \pm 0.1 \text{ MPa}$	±?

Table 1 Summary of experimental results from multiple trials

Metric	Sample	# Trials	Our System	Known Value	Error
Young's Modulus	Latex	?	?	$740 \pm 10 \text{ kPa}$	±?
	Nitrile	?	?	$2.4 \pm 0.2 \text{ MPa}$	±?
Ult. Tensile Strength	Latex	?	?	$3.3 \pm 0.1 \text{ MPa}$	±?
••	Nitrile	?	?	$4.4 \pm 0.1 \text{ MPa}$	±?

Table 2 Summary of experimental results from multiple trials