



Project Title: MillikanCV

Principal Investigator: Dr. Nathaniel Blanchard

Co-Investigator(s): Caleb Christian, Ethan Seefried

Protocol #: 6403

Consent to Participate in Research

Purpose, Procedure, and Duration:

We are researchers from Colorado State University (CSU), Department of Computer Science, inviting you to participate in a study. We want to learn more about how modern technologies in Computer Vision can improve the educational experience and learning outcomes of the Millikan Oil-Drop Experiment.

If you agree to participate in our study, **you will be asked to perform the Millikan Oil-Drop Experiment using a computer system.** There will be a short pre-experiment survey to assess your familiarity with laboratory experiments. After completing the experiment, **you will be asked to fill out a questionnaire about your experience with the system.**

The entire session will take about 30 minutes to complete. We expect approximately 30 people to participate in this study.

Eligibility:

You must meet the following requirements to participate in this research study:

- Be at least 18 years old.
- Be a current undergraduate student **or** have laboratory experience.
- Have not previously participated in this study.

Risks:

There are minimal risks associated with this study. Some of our questions may make you feel uncomfortable or upset, but you can skip any question you don't want to answer. You can also stop the study at any time without penalty. We will use Google Surveys to collect your responses.

They may have Terms of Service and Privacy policies outside of the control of CSU that allow them to use your data for other purposes. We will make every effort to safeguard your data. However, we cannot guarantee the security of data obtained via the Internet.



Benefits:

You may not benefit personally from being in this study, but your participation could help us understand more about improving laboratory experiments in education using modern technology, which may benefit future students.

Privacy and Future Use:

Your participation in this study is confidential. While we will collect data on your performance during the experiment and your responses to questionnaires, this data will not be linked to your identity. We will not collect names, student IDs, email addresses, or any other identifiable information. Any data collected will be stored securely and used only for research purposes. We may use your responses and performance data in future research or share them with other researchers, but no identifying information will be included.

Complaints or Concerns:

If you have questions about the study, please contact the researcher using the contact information provided above.

If you have any questions about your rights as a volunteer in this research, contact the CSU IRB at: CSU_IRB@colostate.edu

Thank you for taking the time to consider our study. You do not have to participate, but we hope you will.

Please select an option below to indicate you read this information and you wish to take the survey:

1. I agree to be in this study.
2. I don't want to be in this study.



Pre Experiment Survey:



Post Experiment Survey:

