

APR
23
2018

Important Dates

Last Day of Spring	May 11
SEAS Undergraduate Commencement	May 19
First Summer Session Begins	May 29

Campus Events

Guest Speaker in Robotics

April 24 | 10:00am & 5:00 pm | Davis 338A

Dr. Reid Simmons, Professor at CMU in Robotics & Program Director at the National Science Foundation, will be visiting. He will give a talk at 10 AM about the NSF National Robotics Initiative. A reception will be held with students at 5 pm. Come chat with him about graduate school, the National Science Foundation Graduate Research Fellowship Program (GRFP) and any other academic topic of your choice.

Internship Opportunities

US Army Corp of Engineers Pathways Internship Program

Deadline to Apply: April 26

Internships are available for ME students who are US citizens. To learn more and apply, [visit here](#).

Ryan Lenihan from the US Army Corps of Engineers in Buffalo will be on campus for a short time on Tuesday, April 24 (10am-Noon). [Sign up for Q&A](#).

Taylor Devices, Inc.

Taylor Devices, Inc., located in North Tonawanda, NY, is the leading manufacturer of shock absorbers, liquid springs, shock isolation systems, seismic isolators and other types of hydro-mechanical energy management products. They are currently looking for [Environmental Engineering](#) and [Technical Sales Intern](#). Complete postings on Handshake.

Research Participation

Drone Noise Research

MAE and the Department of Communicative Disorders and Sciences are looking for participation in their research. Participants will be paid \$40. See attached to learn more.

ANNOUNCEMENTS

Save the Dates

MAE Student Excellence
End of Year Ceremony
May 2 | 1:00 pm
See attached.

Commencement Reception
Immediately following
the ceremony
Details to follow.

Zimmer Scholarship

Zimmer Summer Scholarship
Deadline: May 4 2018
[Learn more](#) | See attached.

Internships & Research

Interested in learning more about Internship and Research opportunities? Learn more on the MAE Website.
[Internships](#) | [Research](#)

 University at Buffalo
Department of Mechanical
and Aerospace Engineering
School of Engineering and Applied Sciences

mae.buffalo.edu

To post to the weekly bulletin, contact Brittany Sandor at bsmetank@buffalo.edu

Participate in *Drone Noise* Research at UB!

Eligible participants will be paid \$40

Participants Must be:

- 18-35 years old
- A Native English Speaker
- Have Normal Hearing



- Participants will be required to have their hearing evaluated at the UB Hearing Clinic on the South Campus
- During the Spring Semester, each volunteer will participate in a 2 hour experiment on the UB North Campus
- Sentences and alphanumeric characters will be presented and participants will be asked to record what they hear while in the presence drone noise
- You will have the option to be involved in an additional testing session this summer at UB



For more details, questions, or to sign up, contact: ***DroneForBuffalo@gmail.com***

ADAMS Laboratory
Sound & Vibrations
Laboratory

University at Buffalo
Department of Communicative Disorders and Sciences

University at Buffalo
Department of Mechanical and Aerospace Engineering
School of Engineering and Applied Sciences

Drone Research:
Contact

DroneForBuffalo@gmail.com

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Permission to Take Part in a Human Research Study



University at Buffalo Institutional Review Board (UBIRB)

Office of Research Compliance | Clinical and Translational Research Center Room 5018
875 Ellicott St. | Buffalo, NY 14203
UB Federalwide Assurance ID#: FWA00008824

Adult Consent to Participate in a Research Study

Title of research study: Noise Regulation in Small Unmanned Aerial Vehicles: Towards Ergonomic Integration in Complex Warehouse Environments (Project No. 1141658, Task 1)

Version Date: February 5th, 2018

Investigator: Mostafa Nouh

Department of Mechanical and Aerospace Engineering

Why am I being invited to take part in a research study?

You are being invited to take part in a research study because you are 18-35 years old, a native English speaker, not pregnant, and have normal hearing sensitivity.

What should I know about a research study?

- Someone will explain this research study to you.
- Whether or not you take part is up to you.
- You can choose not to take part.
- You can agree to take part and later change your mind.
- Your decision will not be held against you.
- You can ask all the questions you want before you decide.

Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt you, talk to the research team at DroneForBuffalo@gmail.com. You may also contact the research participant advocate at 716-888-4845 or researchadvocate@buffalo.edu.

This research has been reviewed and approved by an Institutional Review Board (“IRB”). You may talk to them at (716) 888-4888 or email ub-irb@buffalo.edu if:

- You have questions about your rights as a participant in this research.
- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.

Why is this research being done?

This research is being conducted to examine what levels of unmanned aerial vehicle (UAV or “drone”) noise are preferable and safe for human-UAV interactions. With these levels established and used as a reference, our team of engineers will design equipment for UAVs that will appropriately dampen the noise that they emit.

Permission to Take Part in a Human Research Study

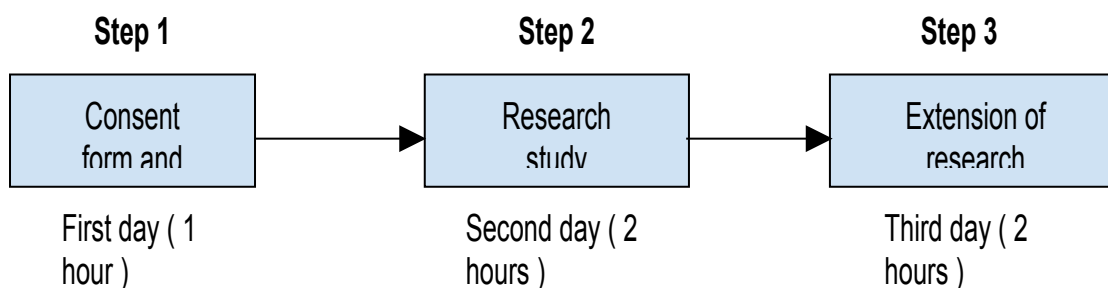
How long will the research last?

The research will consist of two steps and one optional part. The first step is a hearing screening and the second is the research study. The optional step is an extension of the research study. We expect that the hearing screening and signing of the consent form will take approximately one hour. The research study portion is expected to take approximately two hours for a full experiment. A small group of participants will be given the option to volunteer for a second experiment which will also take approximately two hours.

How many people will be studied?

We expect about 30 people in this research study.

What happens if I say yes, I want to be in this research?



- The consent form can be reviewed for as long as necessary,(including taking it home to review if requested). Once you are ready to sign the consent, you will fill out a “Relationship with Noise” questionnaire and undergo a hearing screening. The hearing screening will consist of listening and responding to tones and words. At a later date the research study itself will take place, and will take about 2 hours. If you so choose, approximately four months after the research experiment (Step 2) you may return for a follow-up experiment.
- The hearing screening will be done at the University at Buffalo South Campus’ Speech-Language and Hearing Clinic. The research experiment will be done on the University at Buffalo North Campus’ Sandbox in Bonner Hall.
- This research study will take place during the UB Spring Semester of 2018. The extension (Step 3) would take place in the Summer of 2018.
- During the study, there will be sound stimuli in the form of alphabetical and numeric characters and sentences presented over a speaker that you will be responsible for listening to and recording on paper or typed on a computer. During the task, a UAV will be placed in your proximity at varying distances and with varying levels of noise. You will be seated at a desk throughout the task.
- You may be contacted to participate in Step 3 of the study if you wish: there will be a question regarding your interest in participating on a form that you will fill out at the time of the hearing screening. You will not be required to participate in Step 3 of the study even if you mark that you are interested in doing so. The same tasks that are done during the first part of the study will be done at this time as well.
- Anonymous data will be recorded that tracks the participants’ performance in accurately relaying information while subject to the UAV/background noise. Data will be stored in spreadsheets with no personal/identifying information.

Permission to Take Part in a Human Research Study

What are my responsibilities if I take part in this research?

If you take part in this research, you will be responsible to:

Attend a hearing screening at the University at Buffalo's Speech-Language and Hearing Clinic and the experiment which will take place on the University at Buffalo North campus. You will be responsible to contact DroneForBuffalo@gmail.com if you will not be able to complete any parts of this research.

What happens if I do not want to be in this research?

Your participation in this research study is voluntary. You may choose not to enroll in this study. If you are a student, there are no academic rewards for participating and no penalties for not participating.

What happens if I say yes, but I change my mind later?

You can leave the research at any time it will not be held against you.

Is there any way being in this study could be bad for me?

There are no known risks associated with these procedures: all sounds and noises that participants will be exposed to will be emitted at safe volumes and durations that are incapable of causing hearing damage. The UAV will be tethered to the ground throughout the experiment so the participants are not at risk of coming into physical contact with it at any time.

Will being in this study help me in any way?

The first step of this study involves a free hearing evaluation, so you will be informed of the current status of your hearing.

What happens to the information collected for the research?

Efforts will be made to limit the use and disclosure of your personal information, including research study and medical or education records, to people who have a need to review this information. We cannot promise complete secrecy. Organizations that may inspect and copy your information include the IRB and other representatives of this organization.

Can I be removed from the research without my OK?

The principal investigator of the study can remove you from the research study without your approval. Possible reasons for removal include:

If the hearing screening reveals any significant hearing loss then you will not be able to continue in this study.

We will inform you whether or not you have a hearing loss and will make recommendations regarding hearing services upon request.

What else do I need to know?

This study is being made possible by a grant from SMART (Sustainable Manufacturing and Advanced Robotic Technologies). SMART is a community of excellence that is focused on the development of sustainable, and innovative technologies.

If you agree to take part in this research study, we will pay you \$40 for your time and effort in each separate experimental procedure (not including the hearing screening).

Permission to Take Part in a Human Research Study

Participants will be informed of the results of their hearing screening, in person, immediately after it takes place. When results from the research study are available, patients may contact the lead investigator to obtain their results.

Signature Block for Capable Adult

Your signature documents your permission to take part in this research. By signing this form you are not waiving any of your legal rights, including the right to seek compensation for injury related to negligence or misconduct of those involved in the research.

Signature of subject

Date

Printed name of subject

Signature of person obtaining consent

Date

Printed name of person obtaining consent



2018

MAE Student

excellence

End of Year Ceremony

May

2

1:00 pm

210 Student Union
[Landmark Room]

All students, faculty &
friends welcome

light refreshments will be available

Join us as we honor our Undergraduate Student Excellence Awardees,
and MAE Scholarship Recipients.

AWARDS

UNDERGRADUATE RESEARCHER | YOUNG PROFESSIONAL
HUMANITARIAN | DISTINGUISHED LEADERSHIP | CHAIRS AWARD

with recognition of

ZIMMER AWARD PROGRAM | YONG LEE SCHOLARSHIP



University at Buffalo

Department of Mechanical
and Aerospace Engineering

School of Engineering and Applied Sciences

**The 2018 Zimmer Award APPLICATION
for Undergraduates in
Mechanical and Aerospace Engineering
University at Buffalo**

Name: _____ Person #: _____

Local Address: _____
Street City State Zip

Telephone:() _____ Email: _____@buffalo.edu

Cell: _____ Country of Citizenship: _____

Applications MUST BE submitted by the due dates listed below (an application consists of this Zimmer Application, brief project description, faculty advisor reference letter, and unofficial transcript).

I am applying for (check one):

Summer Scholar _____ DUE by **May 4, 2018** for Summer 2018 Session

Attach:

- (1) a brief project description (a few paragraphs)
- (2) unofficial UB transcript

Name of proposed faculty advisor: _____

Your proposed advisor should also SUBMIT A BRIEF REFERENCE LETTER on your behalf indicating an interest in your project and his/her willingness to work with you. This is submitted directly to Marge Hewlett, 240 Bell Hall.

Please indicate here that you have requested a reference: yes ___ no ___

Sign here: _____ Date _____

Submit Application to: Marge Hewlett, 240 Bell Hall, by due date