

July 27, 2021

Announcements

July 29, Thursday, 9 am: Graduate School "Tips and Tricks" (Kyle Shea; UW Grad Program in Neuroscience Advisor)

<https://washington.zoom.us/j/95680260281?pwd=WXIkM3FUQnduVHRTNmIvWjZLcU93UT09>

Meeting ID: 956 8026 0281

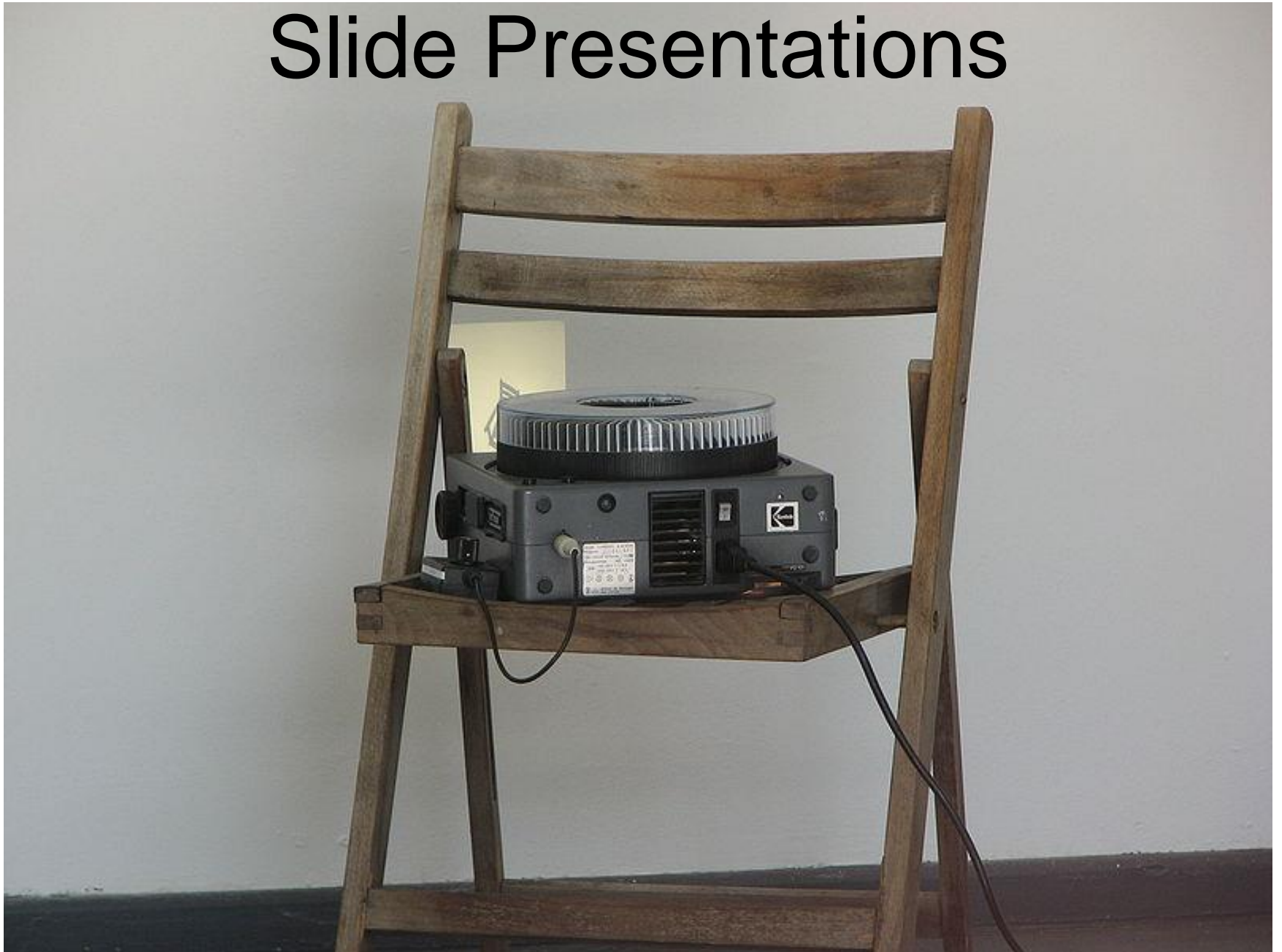
Passcode: 306515

August 9, Monday: Rough draft of abstract/slides/poster due

August 17, Tuesday, Final slides/poster due

August 19-20, Thursday and Friday, Research Symposium

Slide Presentations



Elements of a Good Talk

Content

- Informative
- Interesting
- Important

Style and Delivery

- Professional
- Enthusiastic
- Friendly and approachable
- Tells a story

Clarity and Organization

- Points build, lead to conclusion
- No distracting “extras”
- Avoids jargon
- Doesn't run over time

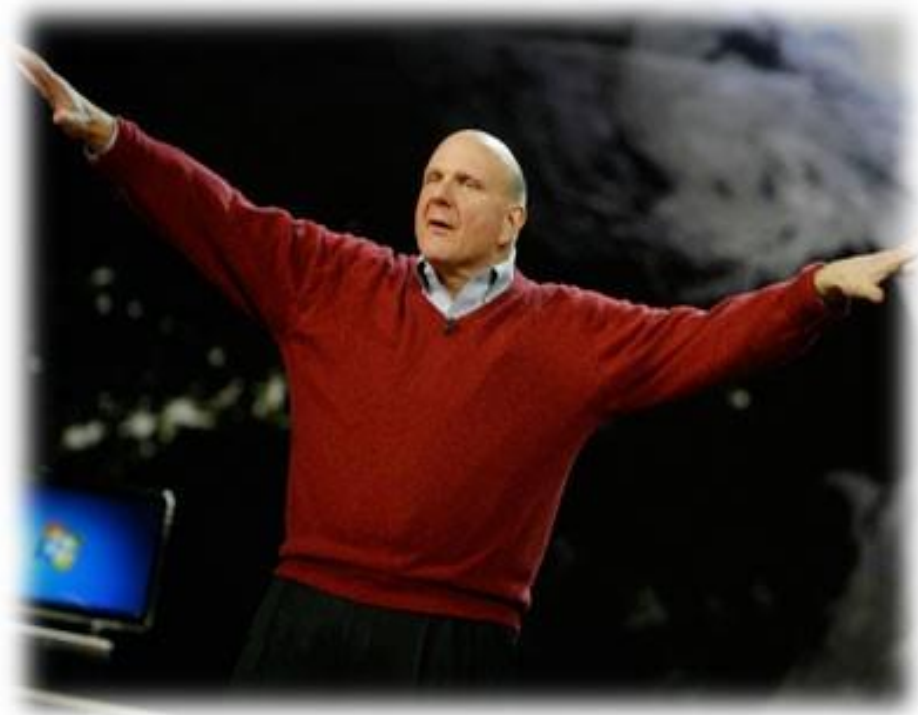
Expertise

- Credible
- Able to answer questions

Adapted from Susan McConnell, Stanford University

Stage Presence

- Talk to the audience
- Make eye contact
- Vary your voice and tone
- Let your personality come through
- Don't laugh at your own jokes
- Move and gesture
- Be aware of where you are standing
- Be confident
- Relax
- Smile



Speaking Voice

- Enunciate
- Project
- Pace yourself
- Emphasize key points
- Don't sound scripted
- Breathe



Organize

- Introduce yourself and your topic
- Frame your talk with motivation
- Build to your conclusions – don't include extraneous data/figures
- Work on smooth segues
- Explain why your results are new, interesting and important



Format

- Introduction
- Methods
- Results
- Conclusions
- Acknowledgements



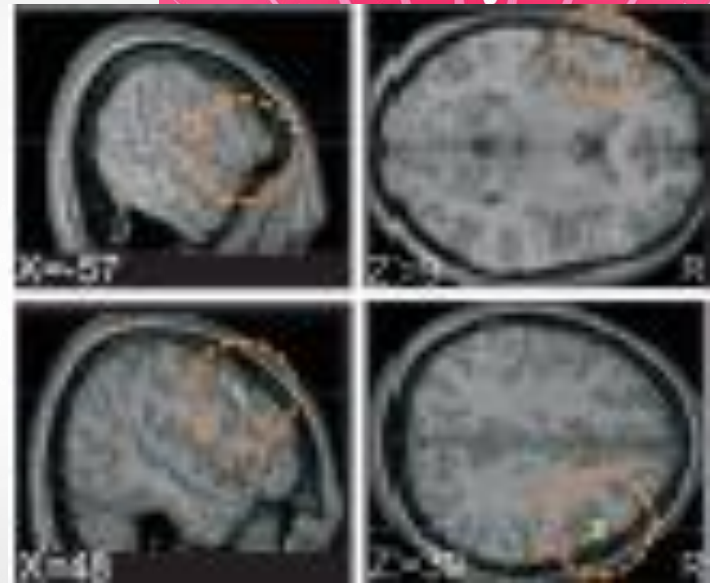
Making Slides: Things to Do

- Choose your background and theme wisely
- Keep it simple
- Use more graphics, less text
- Be judicious with bullets
- Explain everything on your slide
- Use movies when appropriate
- Check your spelling
- Have extra slides ready



MAKING SLIDES: THINGS TO AVOID

- ❖ Fancy animations
- ❖ Clip art
- ❖ Unrelated content
- ❖ Low resolution images
- ❖ Unreadable text
- ❖ Unlabeled figures
- ❖ “Raw” figure edges
- ❖ Sound effects



Fonts

Do not get creative

Or fancy

This is a scientific presentation

You will only appear amateur

Use 18 point or larger



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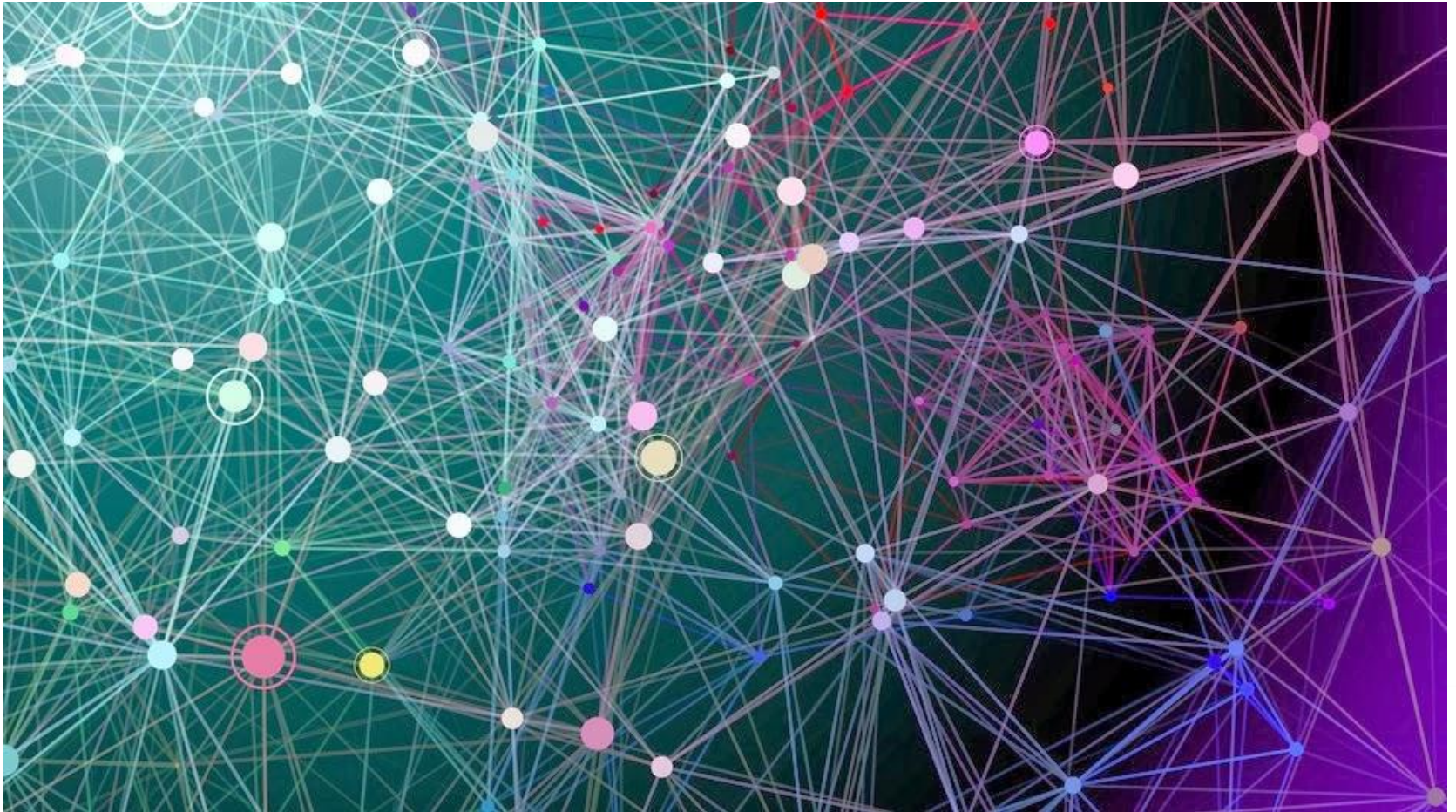
The Best Title Ever Written

Your Name
Affiliation



The Best Title Ever Written

Your Name
Affiliation



Slide Title Here

Motivation for the research (1 slide)

- Clinical problem? Add some statistics?
- Unmet need?
- Open question?
- New method?
- Gap in the literature? What is new?
- Figure?



Slide Title Here

Methods (1 slide)

- Model (human, animals, computational?)?
- Materials?
- Statistical analysis?
- Figure?



Slide Title Here

Results (1-3 slides)

- Data
- Figures should take up most space
- Graphs
- Photographs



Slide Title Here

Discussion/Conclusion (1-2 slides)

- Summary statement
- Future work?
- Figure?

Extra Slides?



Acknowledgements

The mentorship of XXX YYY and Dr. AAA BBB was greatly appreciated.

and/or

The assistance of CCC DDD



Mentors



Lab



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Acknowledgements

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- Dr. ABC XYZ
- ZBH CYT
- DBC EHU



Lab

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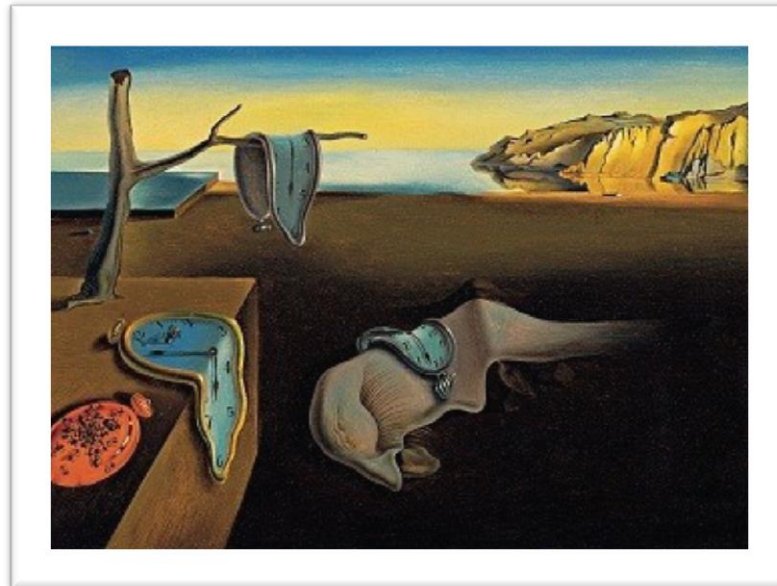


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Time

- Fill your time
- Don't go over time
- Allow time for questions



What to Wear

MATLAB-Based Circuit Models for Integrated Neural Stimulation Electronics

Emerson Revoncoz¹, Eric Pepin¹, Jacques C. Rudez¹
¹Department of Electrical Engineering, University of Washington, Seattle, WA
²San Diego State University, San Diego, CA

Introduction
 The adoption of this platform to create custom models within the MATLAB environment allows for rapid prototyping and testing of new designs for neural stimulation electronics. This platform allows for the rapid prototyping and testing of new designs for neural stimulation electronics. This platform allows for the rapid prototyping and testing of new designs for neural stimulation electronics.

Brain Computer Interface (BCI)
 BCI systems are designed to help people with disabilities to interact with their environment using their brain activity. BCI systems are designed to help people with disabilities to interact with their environment using their brain activity.

CMOS Stimulator Drivers
 CMOS stimulator drivers are used to drive the electrodes of a BCI system. CMOS stimulator drivers are used to drive the electrodes of a BCI system.

Benefits of MATLAB Modeling
 MATLAB modeling allows for the rapid prototyping and testing of new designs for neural stimulation electronics. MATLAB modeling allows for the rapid prototyping and testing of new designs for neural stimulation electronics.

Methods
 Interface Issues to Evaluate/Review: This section discusses the interface issues that need to be evaluated and reviewed. This section discusses the interface issues that need to be evaluated and reviewed.

Results and Discussion
 The results of the MATLAB modeling are discussed in this section. The results of the MATLAB modeling are discussed in this section.

Integrated Sensing of Depth Camera and Electromyography for Human-Computer Interaction

Marissa Dominguez¹, Justin Thompson¹, Bingyi Brunton¹, Thomas L. Dasiel¹
¹Cleveland High School, ²Department of Biology, University of Washington, Seattle, WA

Abstract
 Most recent research in the integration of information from complementary sensor modalities, that the potential to enhance the capability between biological and computer systems. This research focuses on the integration of depth camera and electromyography (EMG) data for human-computer interaction. This research focuses on the integration of depth camera and electromyography (EMG) data for human-computer interaction.

System Setup
 The system setup includes a depth camera, a laptop computer, and an EMG system. The system setup includes a depth camera, a laptop computer, and an EMG system.

EMG System
 The EMG system records electrical activity of muscles. The EMG system records electrical activity of muscles.

Components of EMG System
 The components of the EMG system include a muscle sensor, an Arduino microcontroller, and an EMG data interface. The components of the EMG system include a muscle sensor, an Arduino microcontroller, and an EMG data interface.

Results
 The results of the integrated sensing system are shown in this section. The results of the integrated sensing system are shown in this section.

Discussion
 The discussion of the integrated sensing system is provided in this section. The discussion of the integrated sensing system is provided in this section.

References
 A list of references is provided at the bottom of the poster. A list of references is provided at the bottom of the poster.

Effects of a concurrent cognitive task on walking over an unpredictable foam surface in people with lower limb loss: a pilot study

Naomi Schwartz¹, Valerie Kelly, PT, PhD², Brian Hatner, PhD², Sara Murgan, LCPD²
¹1. Kerk Science Dept., Pitzer College, Claremont, CA, ²2. Rehabilitation Medicine, University of Washington, Seattle, WA

Introduction
 People with lower limb loss (LLL) profoundly impacts sensorimotor tasks involved in walking and alters both the sensory and motor elements that are critical for postural stability when walking. People with LLL have impaired ability when walking in challenging situations like walking on irregular surfaces and report the need to pay attention during these deficits may be due to limited sensory feedback from the prostheses and require persons with LLL rely on cognitive control to maintain postural stability.

Methods
 The study involved 10 participants with LLL. The study involved 10 participants with LLL.

Results
 The results of the study are shown in this section. The results of the study are shown in this section.

Discussion
 The discussion of the study is provided in this section. The discussion of the study is provided in this section.

Conclusion
 The conclusion of the study is provided in this section. The conclusion of the study is provided in this section.

Multi-channel Signal Acquisition for Wearable Devices

James Thorne, Undergraduate, Microsoft College, Computer Science
 Chao Zhang, PhD Student, University of Washington, Electrical Engineering
 Matt Reynolds, Assistant Professor, Department of Electrical Engineering, University of Washington

Abstract
 As wearable technology becomes more prevalent, the demand for more ways of measuring the body's biological functions is increasing. This research focuses on the development of a multi-channel signal acquisition system for wearable devices. This research focuses on the development of a multi-channel signal acquisition system for wearable devices.

Application Structure
 The application structure is shown in this section. The application structure is shown in this section.

Sample Output
 Sample output of the signal acquisition system is shown in this section. Sample output of the signal acquisition system is shown in this section.

Background
 This work is a part of a larger project called BioSense that investigates sensing trends of interacting with environments and provides a new method of streamlining current methods of monitoring and controlling physical health. This work is a part of a larger project called BioSense that investigates sensing trends of interacting with environments and provides a new method of streamlining current methods of monitoring and controlling physical health.

Architecture 1: Single Thread
 Architecture 1: Single Thread

Architecture 2: Multi-Thread
 Architecture 2: Multi-Thread

Architecture 3: Ping Pong Buffer
 Architecture 3: Ping Pong Buffer

<https://youtu.be/MjcO2ExtHso>



The number one rule:

Practice

University of Washington Summer Research Symposium

Who?

Presenters: You! 28 presenters from several UW summer research programs.

Invitees: You, friends, family, lab, general public.

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What?

Content: Your summer research project.

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Where?

Online: Virtual presentations via Zoom.

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How?

Format: Slides or Poster; your choice

Duration: 5 minutes to speak; ~3 minutes Q/A

University of Washington Summer Research Symposium

When?

Date: August 19-20; 14 presentations each day

Time: Start each day at 9 am (PST)

Agenda: Presentations group by topic/program

University of Washington Summer Research Symposium

