

HFES @ The Beach



'TIS THE SEASON



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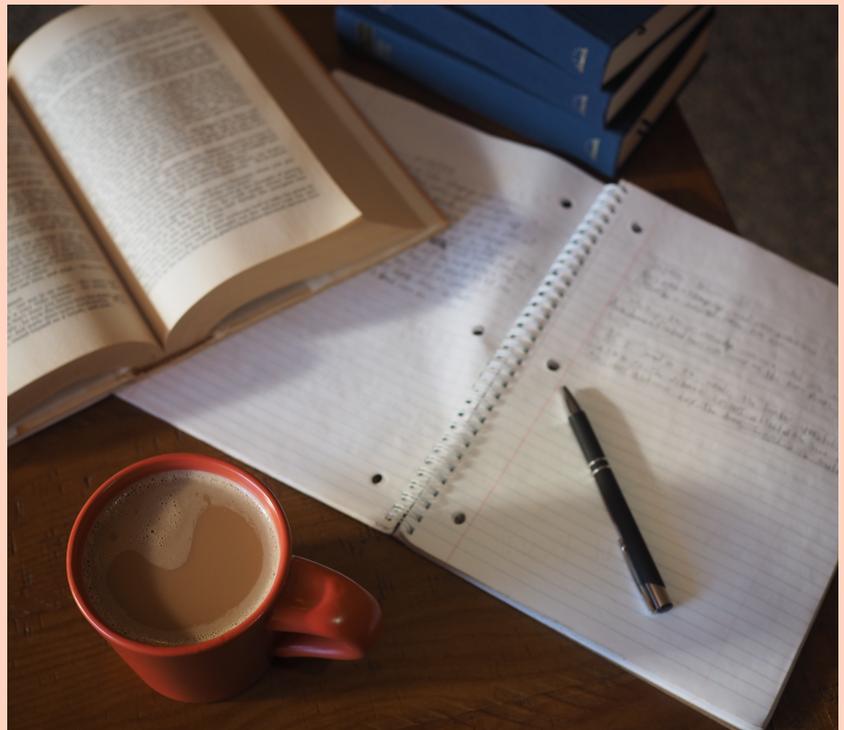
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A Lovely Fall to All

We hope everyone has had a lovely Fall semester! Returning to campus and transitioning to in-person activities has been quite a process. We hope everyone was able to smoothly settle into the new semester and totally rock it!

As the semester comes to an end, we want to remind you that it is okay to take breaks, to make time for your friends, family, games, exercise, reading, hobbies, and, most importantly, for yourself. You have a lot on your plate right now, and taking self-care breaks will help you stay refreshed, engaged, and motivated to finish the semester strong.

May the rest of your 2021 be as wonderful as you are!

Sincerely,
The Newsletter Team

**Congrats to our HFES
Outstanding Scholar of
the Month:
Kristen Brown**



Kristen is an extremely hard worker. She is a T/A in two courses and is also VP of our Student Chapter. Kristen goes out of her way to make the days of her peers brighter and is extraordinarily supportive towards other students. Congrats again to Kristen!

**Human Factors Application:
Setting Goals and Intentions**

Defining effective goals can be a difficult task and achieving them is a whole different matter. The goal-specificity effect can be incorporated to help you achieve your life and educational goals.

Here are some tips on its application:

- Set specific, challenging goals
- Make goals based on feedback and self-monitoring
- Make sure the goals pertain to the proximal (near) future
- Frame the goals with good intentions
- Focus on positive outcomes

Gollwitzer, P. M. (1999). Implementation Intentions: Strong Effects of Simple Plans. *The American Psychologist*, 54(7), 493-503. <https://doi.org/10.1037/0003-066X.54.7.493>

Upcoming Events

**CSULB 17TH ANNUAL HFES
STUDENT CONFERENCE**

Mar 13, 2022

On campus!

More details to come

Spring semester

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SOCIAL @ THE HANGAR

**Look for more info in
January 2022!**



**Meet Our New
Newsletter Team
Member:
Shraddha Swaroop**



Riveting Research: How Long Can a Driver (Safely) Glance at an Augmented-Reality Head-Up Display?

by Cindy Pham

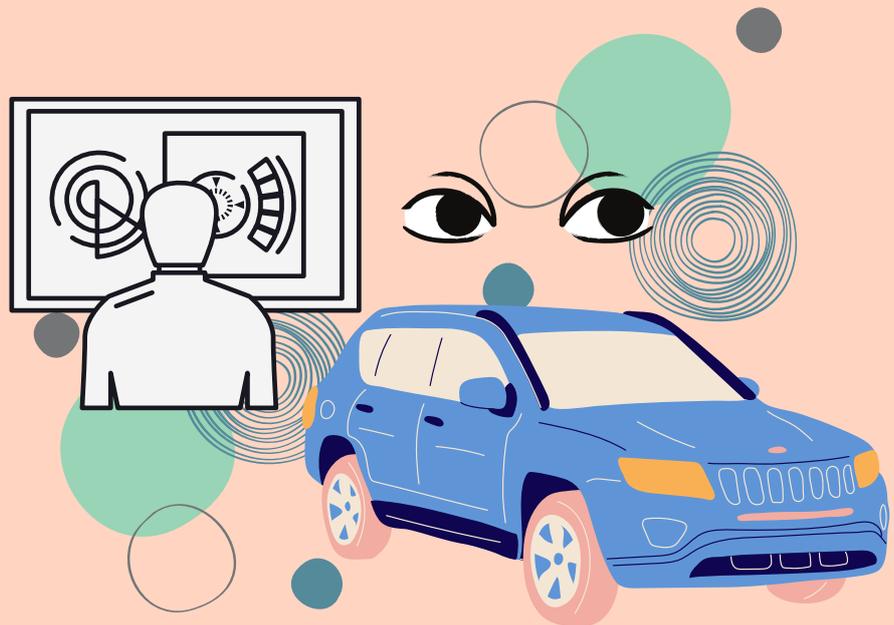
The incorporation of augmented reality (AR) displays in vehicles may not be so much of a distant matter. AR is a possible solution to helping drivers perform secondary visual tasks.

Faria and Gabbard (2020) examined augmented reality (AR) head-up display (HUD), arguing that AR HUDS effectively reduce distraction potential. They claimed that such displays allow for longer glances with no decrements.

AR HUD interfaces are presented at the line of sight and help the operator perform a primary task. Graphical stimuli are displayed on top of the real-world stimuli to improve driving performance and raise situation awareness.

Compared to in-vehicle information systems (IVIS), such as GPS, AR HUDS has been shown to better improve driving performance.

Because there has been no previous consensus, the researchers wanted to explore whether there was a threshold period for safe executions of secondary tasks.



In their study, a driving simulator was used. Participants had to drive in different environments and display times. The environments were either conventional or realistic. There were also four glance durations: 20, 30, 40, and 50 seconds.

The conventional environment was based on the National Highway Traffic Safety Administration driver distraction guidelines. The roads in the environment were straight with no additional traffic. In contrast, the realistic environment replicated a driving scenario where cars would speed at random times. There were also curves in the road.

The results demonstrated that performance decreased when sustained glance duration reached 50 seconds. Faria and Gabbard (2020) were able to provide a new safe glance baseline (a difference from a 2-second glance duration from a study in 2006). The researchers also recommended using realistic driving scenarios to capture driver behaviors and data that is applicable to the real world. The study helps progress the literature for AR HUDs in cars.

Bach, B., Sicat, R., Beyer, J., Cordeil, M., & Pfister, H. (2018). The Hologram in My Hand: How Effective is Interactive Exploration of 3D Visualizations in Immersive Tangible Augmented Reality? *IEEE Transactions on Visualization and Computer Graphics*, 24(1), 457-467. <https://doi.org/10.1109/TVCG.2017.2745941>

Pomodoro Technique

Stuck in a rut with studying and end-of-the-semester projects? Getting overwhelmed with everything you have to do? This is where the Pomodoro technique comes in!

This technique is based on the understanding that our brains do best when focused on one task, thereby avoiding task switching, and when we take breaks after a chunk of focused work time. Here are the steps:

1. Pick a task
2. Set a timer for 20-25 minutes
3. Work on that task (with no distractions allowed!) until the timer goes off
4. Take a 5-minute break
5. Repeat three more times, then give yourself a reward with a 15-30 minute break

This will help you stay refreshed, do your best work, and optimize your day.



Spring Cabinet Opening

If you are a graduate student interested in taking on a leadership role within our chapter, make sure to attend our first meeting of Spring 2022 (date and time TBD)! Our wonderful president, Cindy Su, will be graduating this Fall, which leaves her position open and needing to be filled.

The President is in charge of keeping all other officers organized and on track. You oversee the monthly meetings and communicate with the chapter and faculty. You partner with each of the other officers to facilitate all student chapter efforts.

If this sounds like a position you would be interested in, make sure to be there for our first Spring meeting and the election for this important (and impressive!) position.



Meet Your MSHF Student Rep: Shraddha Swaroop

We are thrilled to introduce you to Shraddha, our MSHF Student Rep! She is happy to talk with you if you have any questions, concerns, or other thoughts about the program. Please do not hesitate to reach out to her if you are having trouble with the MSHF program.

Research Interests: Health Care Human Factors, Automation, Virtual Reality Human Factors, Artificial Intelligence Human Factors, and Aeronautics Human Factors

Our Fall 2021 Student Chapter Cabinet!

We want to officially recognize everyone who was elected to our cabinet for this semester!

President
Cindy Su



Research Interests:
Human/Computer
Interaction, User Experience,
Usability Testing

Vice President
Kristen Brown



Research Interests:
Decision Making, Memory,
Individual Differences, HCI,
Usability, User Experience
in the Medical Industry

Treasurer
Dawson Ohligschlager



Research Interests:
Human/Computer
Interaction, Automation,
Perception,
Cryptocurrencies, Cognition

Secretary
Christian Schmitz



Research Interests:
Augmented Cognition,
Automation, Usability

**Co-Social Chair
Megan Mitchell**



Research Interests:
Aerospace Human Factors

**Historian & Co-Social Chair
Ryan Karp**



Research Interests:
Navigation, User Experience,
Usability, User Safety

**Co-Webmaster
Ha Nguyen**



Research Interests:
Medical Human Factors,
Cybersecurity, User
Experience, Design

**Co-Webmaster
Jessica Mar**

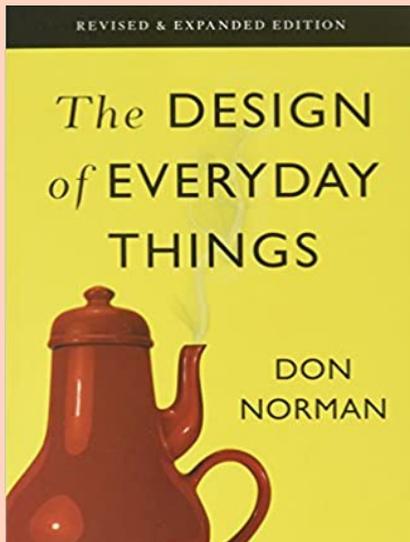


Research Interests:
UI/UX, Accessibility,
Human Factors in
Healthcare and Medical
Industry, Interface Design

**Outreach Coordinator
Katie Sabo**



Research Interests: Health Care
Human Factors, especially Medical
Devices, Accessibility, Workspace
Design, UI/UX, Individual Differences



HF Book Rec: *Design of Everyday Things*



An excellent book about how to design usable products that is easy-to-read and well-written from one of the masters in the field. It has plenty of relevant examples (text and images) of good and bad design, including buildings, appliances, and technology. Here is a gem from the book "If an error is possible, someone will make it. Errors should be easy to detect, they should have minimal consequences, and, if possible, their effects should be reversible."



Dr. H's Corner o' Awesome

I hope everyone had a wonderful fall semester! Wishing you all the best as we slowly and surely start our migration back to campus. Make sure to take advantage of the amazing opportunities that the Student Chapter is hosting this year, especially our virtual guest speakers. A great thank you is due to our out-going Cabinet who made our last year such a success, and a welcome to our new SC Cabinet who will be continuing this hard work!

Dr. H.



Have Something to Share?

Want to contribute to the newsletter? Click here to fill out the form!



HFES

Systems That Work for **Humans**

California State University, Long Beach Student Chapter