

Student Chapter Name	HFES – Georgia Tech
Recognition Level Sought	Gold
Chapter President	Dar-Wei Chen
E-mail Address	darwei.chen@gatech.edu
Faculty Advisor	Dr. Wendy Rogers
E-mail Address	wendy.rogers@psych.gatech.edu
Chapter Mailing Address	hfes@gatech.edu
Telephone number	404-894-6775 (Dr. Rogers office)

Table of Contents

Recruitment	2
Guest speakers	3
Field trips	4
Outreach	5
Collaboration	7
Exploration	8
Social	9
Information dissemination	11
Continuous improvement	12
Supporting documentation	13
Letter of endorsement	26

RECRUITMENT

Graduate Student Expo

Date: August 13, 2015Documentation: Exhibit A

• Description: At the start of each semester, Georgia Tech hosts an event for organizations to showcase themselves to graduate students. HFES-GT participated this year by setting up a booth where graduate students could talk to members of the chapter about joining the group. The student chapter was able to obtain the email addresses of more than twenty people who were interested in learning more about HFES, many of whom were outside the School of Psychology. Reaching graduate students outside of the School of Psychology was one of the major goals of the student chapter this year because of the increased potential for multi-disciplinary projects, and it appears that the Graduate Student Expo paid off in that regard.

Engineering Psychology Colloquium

Date: August 18, 2015Documentation: Exhibit B

• Description: The student chapter president made a presentation at the first engineering psychology colloquium session of the 2015-2016 school year; the function of the presentation was to persuade the students of the program to join the student chapter by A) reviewing the chapter's previous accomplishments, and B) previewing the events of the year.

GUEST SPEAKERS

Dr. John Stasko, College of Computing, Georgia Tech

Date: September 24, 2015Documentation: Exhibit C

• Description: HFES-GT was excited to host Georgia Tech's own Dr. John Stasko for a talk to the students about his research in information visualization and visual analytics. He introduced the field in general, showed off a few examples of visualizations that he or other people have done, explained some of the artistic side of visualization as well, and answered questions at the end. Eight members of the student chapter were able to attend the talk.



FIELD TRIPS

Museum of Design – Atlanta

Date: November 18, 2015Documentation: Exhibit D

• Description: 3D printing was MODA's featured exhibit when the student chapter visited and the students were able to learn about many of the ways that this new technology is able to better people's lives. Among the featured displays were dresses, buildings, prosthetics, DNA (!), jewelry, and other items that can all be produced using printers. The human factors field is generally about making people's lives easier, and 3D printing looks to be a huge step in that direction; in the future, when these printers are more commonplace, people will be able to create more customizable products to suit their needs.

OUTREACH

National Ergonomics Month Action Plans

• Date: submitted July 27, 2015 • Documentation: Exhibit E

• Description: HFES-GT unveiled a new activity for NEM that helped the student chapter increase awareness of the HF/E field. The activity is titled "SPACE RACE: Humans vs. Aliens!" and gives people a hands-on opportunity to learn about the importance of good design in workspaces. The activity consists of two teams working on their own assembly lines to build spaceships: On one side is the Humans, who have an assembly line created with good human factors principles (instructional design, physical accommodations, and intuitive arrangements of materials), while the other side is the Aliens, who did not implement human factors and therefore have a difficult time assembling their spaceships. The Space Race was able to convincingly show how life could be easy when things are designed with the user in mind, and miserable if not designed as such. For their efforts, the student chapter was awarded "Gold" in the NEM Best Action Plans competition.

National Ergonomics Month Expo

• Date: October 26, 2015 • Documentation: Exhibit F

• Description: An abbreviated version of the "Space Race" activity was made available for conference-goers to play with at the NEM Expo on the first day of the HFES conference. The project lead (Angela Yoo) was there to demonstrate the activity as well as provide guidance for attendees on how to carry out the activity or create their own activities similar to it. Lots of positive feedback was received and there were some discussions with Dr. Joe Keebler about publishing an article in *Ergonomics in Design* related to this activity and/or other outreach activities.

HFES university labs showcase

• Date: October 27, 2015 • Documentation: Exhibit G

• Description: This year's poster (for presentation at the HFES annual conference), which showcased all six of the engineering psychology department's active laboratories, was coordinated through the student chapter. One representative from each lab was allowed to be a presenting author on the poster; the chapter president coordinated the logistics and the gathering of information for the poster. The showcase provided an opportunity for chapter members to interact with poster session attendees whether it was technical content related or just networking for future work opportunities.



Bad Design Atlanta

Date: Fall 2015

• Documentation: Exhibit H

• Description: Every year, the student chapter hosts the *Bad Design Atlanta* contest, which calls for people to find examples of bad designs around campus and/or the city and to highlight them by pointing out the faults of the design and proposing solutions. The contest was announced in September 2015 through various venues including fliers in residence halls, social media, school-wide news digests, and short pitches in relevant psychology classes. Submissions were judged by student chapter members and psychology faculty, and the winners were invited to speak to the student chapter members about their findings. Prize money was awarded as follows: first place = \$75, second place = \$50, and third place = \$25.

Fernbank "Science at Hand" Day

• Date: November 7, 2015

Documentation: Exhibit I

• Description: The Fernbank Museum introduces kids to various science specialties every year through their annual "Science at Hand" Day, and HFES hosted a booth to spread the word about the HF/E field as a science. One of the activities at the booth was the aforementioned "SPACE RACE: Humans vs. Aliens". The other activity involved chapter members showing pictures of poorly-designed products/items/interfaces and having the kids use their intuition to identify the problems with those things. Chapter members also engaged the kids in discussions about basic HF/E principles that were violated with these designs and how they could learn to apply these principles in other situations. This event served as a great opportunity to expose kids to the field at an early age so that they become informed citizens of the field as they grow up.

Atlanta Science Festival – Exploration Expo

• Date: March 26, 2016 • Documentation: Exhibit J

• Description: Every year, the Atlanta Science Festival (ASF) is held in late March with the intent of increasing awareness and interest in science, particularly among children. HFES-GT was glad to contribute to this effort by hosting a booth at ASF similar to the one hosted at the Fernbank "Science at Hand" Day (see the previous entry for description of booth), but this time in collaboration with the Clemson chapter of HFES. This event provided a very large potential audience for the student chapter (expected attendance of 20,000; official numbers have not been reported yet).

COLLABORATION

Engineering psychology program

• Date: Fall 2015

• Documentation: Exhibits G and K

• Description:

- o **HFES university labs showcase** (see "Outreach" entry and Exhibit G): The Georgia Tech engineering psychology program collaborated with the student chapter to present a poster at the annual conference explaining the work happening in each of the program's six laboratories.
- Engineering psychology program newsletter (see Exhibit K): The engineering psychology program highlighted the accomplishments of its students and faculty in an annual newsletter, which was published in September 2015. The student chapter supplied some of the content, including updates on the chapter itself, for the newsletter that reached many friends and alumni of the engineering psychology program.

School of Psychology

Date: February 9, 2016Documentation: Exhibit L

 Description: At the February 9, 2016 general meeting, HFES-GT students took some time to provide feedback to the faculty and IT staff regarding the newlydesigned School of Psychology website. The students performed think-aloud protocols and heuristic evaluations to identify problem areas that could trip up potential users. The activity was a service to the School of Psychology but also enabled the students to apply their human factors expertise in a very practical manner.

Clemson HFES student chapter

Date: March 26, 2016Documentation: Exhibit J

• Description: At the Atlanta Science Festival this year, Georgia Tech's and Clemson's student chapters worked together to host a booth that gave kids the opportunity to learn about the human factors field. Participants at the booth were given the opportunity to build Lego spaceships using directions with good or bad human factors (the "Space Race") as well as look at pictures of poorly-designed items and discuss potential improvements for those items. The student chapters also took the opportunity to network a little bit to facilitate future collaboration on events.

EXPLORATION

Online Collaboration Applications Evaluated by Ease of Use

- Date: February 2016 (manuscript proofs received)
- Documentation: Exhibit M
- Description: HFES-GT members worked together to evaluate popular work collaboration tools (e.g. Google Docs, Cisco WebEx) using human factors principles and produced recommendations regarding the best tools for various functions (e.g. scheduling events, sharing files). A manuscript summarizing the findings was submitted to *Ergonomics in Design* last year and received a "revise and resubmit" decision. The "web tools" paper was eventually revised, accepted, and proofs were sent to the lead author (Lauren Margulieux) in February.

Redesign of the American voting process

- Date: February 2016 (accepted)
- Documentation: Exhibit N
- Last year, HFES-GT won first place in the HFES "Voting System of Tomorrow" competition and was recognized at the annual conference. The students decided to publicize their work in that project by submitting a manuscript to *Ergonomics in Design* that summarized their findings. The manuscript provided HF/E-driven recommendations for how the American voting process could be streamlined (website design, voter accounts, appointments, intuitive ballots, etc.) and it was accepted in February.

Centers for Disease Control (CDC) immunization schedule redesign

- Date: 2015-2016 school yearDocumentation: Exhibit O
- Description: Dr. David Kim of the Centers for Disease Control asked HFES-GT for help in redesigning the CDC's immunization schedule, and the students were happy to help! The figure was starting to become too difficult to decipher with all of the information being added to it, so he wanted to know if we would be able to use human factors principles to create a user-friendly version of the figure. We redesigned parts of the schedule and passed the deliverables to Dr. Kim in April. When these changes are approved, the new schedule will be used in doctors' offices to help them determine when certain vaccines are to be used and under what conditions.

SOCIAL

Fall social

Date: September 29, 2015Documentation: Exhibit P

Description: Traditionally, the student chapter does not host a social event in the
fall semester, but the officers this year recognized a need for the new students to
have a chance to mingle with the current students outside of an academic setting.
The fall social event was held at a local bar (Cypress Pint and Plate) with 12
people attending to welcome the new students better and kick back with other old
friends from the chapter.

Alumni Dinner

Date: October 27, 2015Documentation: Exhibit Q

 Description: The annual HFES conference brings Georgia Tech alumni together from all around the world, so the student chapter always takes advantage of the opportunity by hosting a dinner event for alumni to socialize with the current engineering psychology students and faculty. This year, 31 people were in attendance at the dinner, which was held at The Briks, just a few blocks from the conference hotel.

HFES student chapter presidents' luncheon

Date: October 28, 2015Documentation: Exhibit R

• Description: The president of HFES-GT attended the annual luncheon held at the conference and had the opportunity to interact with the presidents of other student chapters as well as learn about what the other chapters had accomplished in the past year. Of note was the fact that some of the other chapter presidents seemed to be interested in the new "Space Race" activity created by the Georgia Tech chapter, so arrangements were made for the interested parties to obtain more information about the activity at a later time. Attendance can be confirmed on the sign-in sheet from the event.



"Bad Design" Lunch

Date: December 1, 2015Documentation: Exhibit S

• Description: The winners of the "Bad Design Atlanta" competition were invited to speak with the student chapter about their findings at a small awards ceremony. Two of the winners ended up being able to make it, with Teng Shao discussing improvements that the school gym could make for the swimsuit water extractors (e.g. better visibility of system status needed) and Mengqi Chen outlining ways that the school trolleys could make the handgrips more ergonomically friendly. Each of the winners received their certificates signed by the president and faculty adviser. Food was catered by Moe's Southwest Grill.

End-of-year social at "Escape the Room"

• Date: April 28, 2016

• Documentation: Exhibit T

• Description: To celebrate the student chapter's achievements through the year, the students went to "Escape the Room" near the end of the semester, an interactive puzzle game in which participants must solve mysteries as a team in order to be unlock the room's exit. This event gave students the opportunity to socialize a bit, exercise the brain in non-traditional ways, and build a bit of camaraderie as well. The team ended up escaping with 27 seconds to spare!

INFORMATION DISSEMINATION

"Bad Design Atlanta" contest results on social media

Date: December 2015Documentation: Exhibit U

 Description: After the results of the Bad Design contest were known, the student chapter took the opportunity to publicize the results on social media outlets such as Facebook and Twitter. The posts served to publicize the contest for future iterations, increase awareness of the human factors field, and possibly effect some actual change around campus related to the objects discussed in the winning entries.

CONTINUOUS IMPROVEMENT

Website overhaul

• Date: Fall 2015

Documentation: Exhibit V

• Description: When this school year started, the HFES-GT website was somewhat outdated, both in terms of content, structure, and style. With the help of the department's IT personnel, the student chapter transitioned to a WordPress instance hosted by Georgia Tech, giving the website a modern feel and easier editing ability. The old website is no longer available, but the new one can be seen here: hfes.gatech.edu

Student chapter thank-you notes

• Date: Fall 2015

• Documentation: Exhibit W

• Description: The student chapter places thank-you tent cards on tables at sponsored events to acknowledge the entities that made the event possible. The ones in use last year were a bit outdated, so the chapter created new ones that cover many of the usual sponsors (GVU Center, Engineering Psychology Fund, and the School of Psychology).

Updates to officers' handbook and officers' calendar

Date: 2015-2016 school year
Documentation: Exhibit X

• Description: Last year's officers started the hard work of documenting the many recurring procedures of the student chapter and organizing them into a handbook for future officers to use. This year, the officers continued that work by including more detail that was previously unaccounted for and inserting new information where applicable.

University-wide student organizations platform change

• Date: Spring 2016

• Documentation: Exhibit Y

• Description: The student organizations office at Georgia Tech hosts a central platform for all organizations to post news and resources, whether for internal or public consumption. This year, the platform was changed to one with greater capabilities that required an officers' orientation. Two chapter officers attended the orientation and started the chapter's existence on the new platform (OrgSync; the old platform was called JacketPages).

SUPPORTING DOCUMENTATION

Exhibit A: Confirmation email about Graduate Student Expo

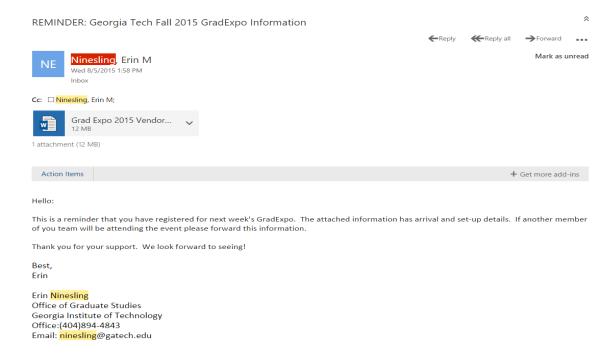


Exhibit B: Engineering psychology colloquium schedule

Georgia Tech Engineering Psychology Colloquium Series

Fall 2015 (Tuesdays)

12:00-1:00 PM, J.S. Coon Psychology Bldg. Rm. 161

Date	Speaker(s)	Topic	
Aug. 18	Rick Thomas / Dar-Wei Chen	Organizational Meeting	
Aug. 25	Laura Barg-Walkow	Internship Discussion	
Sept. 1	David Illingworth / Open	Research Presentations	
Sept. 8	Dar-Wei Chen	HFES—Student Chapter	
Sept. 15	Kelly Winn	IRB	
Sept. 22	Open / Open	Open	
Sept. 29	Cerita Bethea	TBA	



Exhibit C: Email announcement of Dr. Stasko's talk

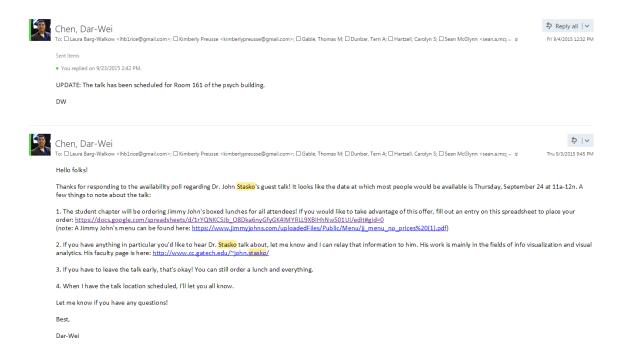


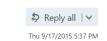
Exhibit D: HFES-GT members listening to a MODA exhibitor talk about 3D printing





Exhibit E: Email from Dr. Keebler announcing Gold Award for Best Action Plans

NEM Action Plan 2015 submission from Georgia Tech HFES chapter



KJ Keebler, Joseph R. <KEEBLERJ@erau.edu>
To: ■Chen, Dar-Wei; Cc: □Yoo, Angela H; *

Dear Dar-Wei,

Congratulations - for the second year in a row Georgia Tech has been awarded "Gold" status for the best action plan.

Please plan on attending the NEM Expo event on Monday during the upcoming HFES meeting. I encourage you to bring a poster, handouts, etc. about your plan, your HFES chapter, and your program.

I am thrilled at the excellent work GA Tech has been doing with their outreach - it's phenomenal. Thank you again for submitting a great plan, and congratulations!

Best,

Joe Keebler NEM Chair

Exhibit F: Angela Yoo at the NEM Expo showing off the "SPACE RACE" activity

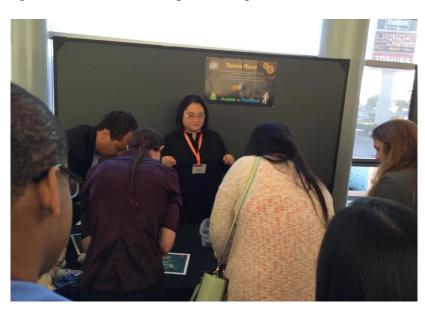




Exhibit G: Confirmation email from labs showcase coordinator

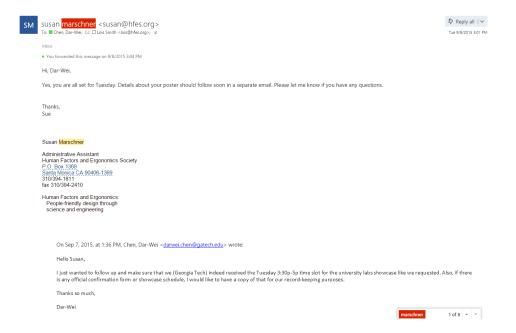


Exhibit H: Bad Design Atlanta winners' congratulations email from chapter president

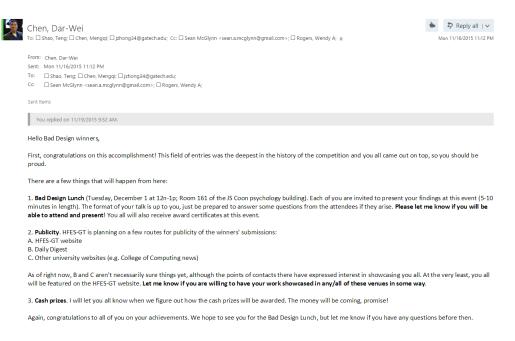




Exhibit I: HFES-GT members interacting with kids at Fernbank Museum's "Science at Hand" Day



Exhibit J: Atlanta Science Festival joint booth with Clemson HFES chapter (no HFES-GT members visible in picture, but HFES-GT banner is visible on left)



Exhibit K: Front page of engineering psychology program newsletter

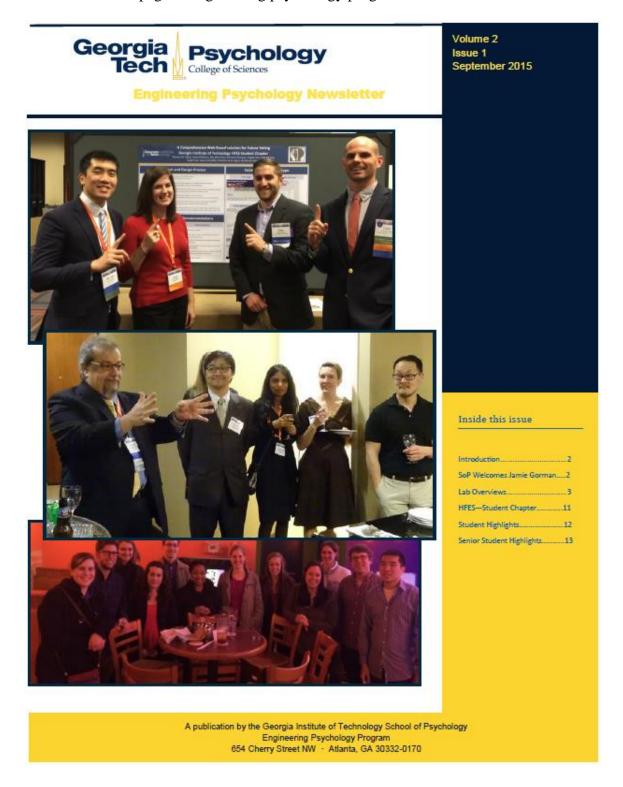


Exhibit L: Agenda for 2-9-2016 chapter meeting (School of Psychology website: psychology.gatech.edu)





Hello HFFS folks!

We will be having our next general meeting on February 9, 2016 at 12n-1p in Room 161 of the JS Coon psychology building (one week from today). Per usual, delicious Papa John's pizza will be provided!

At this meeting, we will:

- take a look at the major events happening this semester
- get updated on the two ongoing projects (it's not too late to join either the CDC or the airport project!)
- do a quick evaluation of the Georgia Tech psychology website, focusing on the engineering psych section in particular (Keenan will show us a tool that we can use to help up with the analysis)
- COLLECT DUES: If you weren't a dues-paying member of HFES-GT last semester and are now having major regrets, it's not too late! For just \$20, you can be a member for this spring semester just bring to the meeting either a check made to "Georgia Tech HFES" or cash (give it to our fabulous treasurer, Carolyn). Being a paying member this semester means you can get free pizza during the meetings, have the chapter cover your costs for chapter-related activities (e.g., social events, field trips), and have a clean conscience when you attend meetings/events.

I'll look forward to seeing you all next week.

Stay Remarkable,

Dar-Wei

Exhibit M: Screenshot of "web tools" EID paper proof

DOI: 10.1177/1064804615611273 **ergonomics in design** | Month XXXX

Month XXXX | ergonomics in design

tag: Applying human factors/ergonomics methods in determining Web app usability reveals pros and cons to improve and facilitate collaborative work.

Online Collaboration Applications Evaluated Based on Ease of Use

By Lauren E. Margulieux, Dar-Wei Chen, Joseph D. McDonald, Keith R. Bujak, Thomas M. Gable, Cale M. Darling, Laura M. Schaeffer, & Laura H. Barg-Walkow

FEATURE AT A GLANCE:

Many online applications promise to unlock the power of collaborative work by connecting people from around the world. Finding an app that is appropriate for a task and easy to use, however, can be difficult. In this study, we evaluated 20 popular apps according to the basic work functions they accomplish (e.g., sharing files) and their adherence to the classic usability standards outlined by Nielsen and Molich. The results can help teams find apps that perform functions that are necessary for their tasks and ensure that the selected app is the best option for the team's productivity.

Exhibit N: Email from EID editor regarding acceptance of voting redesign manuscript

From: < knemire@hfeconsulting.com >

Subject: Ergonomics in Design - Decision on Manuscript ID EID-15-032.R2

Date: February 17, 2016 at 12:12:32 AM EST

To: < thomas.gable@gatech.edu>

Cc: <csb@stuartbuttleergonomics.com>, <sbw@dscience.com>

17-Feb-2016

Dear Mr. Gable:

Thank you for submitting your revised manuscript number EID-15-032.R2 titled "From the Winning HFES "Voting System of Tomorrow" Submission: Heuristic-Driven Recommendations for Improving Voting-Related Processes" and for your patience during the review process. I have had an opportunity to review your manuscript and I am pleased to inform you that we have accepted it for publication in "Ergonomics in Design".

Your manuscript will be scheduled for publication in a future issue. Once the manuscript enters the production stage, the journal office staff will likely have editorial questions for you.

In addition, HFES and SAGE can make your published paper open access (OA); that is, anyone would be able to download the full text free of charge from the time it goes online. This OA publication option is contingent on final acceptance of your paper and payment of a \$1,500 fee. For more information, contact HFES Senior Production Editor Steve Stafford (steve@hfes.org), or refer to http://www.sagepub.com/sagechoice.sp.

Congratulations on a job well done!

Thank you again for your continuing interest in "Ergonomics in Design".

Sincerely,
Dr. Kenneth Nemire
Senior Editor, "Ergonomics in Design"
knemire@hfeconsulting.com

Recommended Adult Immunization Schedule—United States – 2016

Note: These recommendations must be read with the footnotes that follow containing number of doses, intervals between doses, and other important information

age requirement, is vaccination, or last	ok documentation of wi k evidence of past infection; oc	soommended for perso th a risk factor (medica soupational, lifestyle, o her indication)	al,	ommendation	Contraindication	Compensati	y the Vaccine Inj on Program ng on vaccine	
	d immunization schedule for adul	, , , , , , , , , , , , , , , , , , , 					g on indication	
VACCINE▼	AGE GROUP >	19-21 years	22-26 years	27-49 years	50-59 years	60-64 years	≥ 65 years	
Influenza*,2		1 dose annually						
Tetanus, diphtheria, pe	rtussis (Td/Tdap)*,3	Substitute Tdap for Td once, then Td booster every 10 yrs						
Varicella*,4		2 doses						
Human papillomavirus	(HPV) Female*,5	3 doses						
Human papillomavirus	(HPV) Male*,5	3 doses						
Zoster ⁶		1 dose					lose	
Measles, mumps, rubel	la (MMR)*,7	1 or 2 doses (through 59 yrs old)^						
Pneumococcal 13-valen	t conjugate (PCV13)*,8					10	lose	
Pneumococcal 23-valen	t polysaccharide (PPSV23) ⁸	1 or 2 doses^				1 dose		
Hepatitis A*,9		2 or 3 doses						
Hepatitis B*,10		3 doses						
Meningococcal 4-valent	t conjugate (MenACWY) or	1 or more doses^						
polysaccharide (MPSV4)*,11							
Meningococcal B (Meni	3)11	2 or 3 doses ✓						
Haemophilus influenzae	type b (Hib)*,12	1 or 3 doses^						

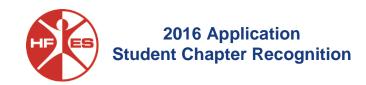


Exhibit P: HFES-GT members at Cypress for the fall social



Exhibit Q: Alumni dinner at HFES national conference





Exhibit R: RSVP email for the student chapter presidents luncheon

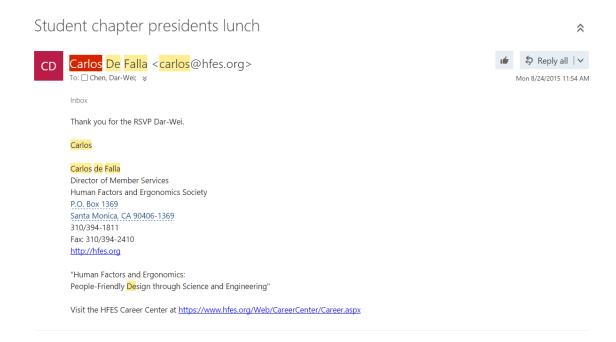


Exhibit S: Email announcement of "Bad Design" Lunch

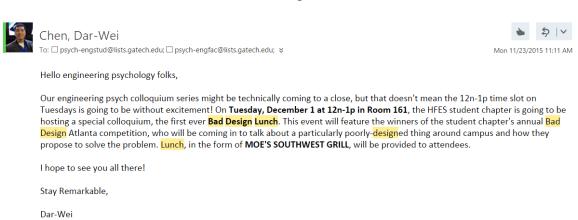


Exhibit T: Group picture from "Escape the Room"



Exhibit U: Screenshot of GVU Center tweet about "Bad Design Atlanta" contest (tweet can be found here: https://twitter.com/gvucenter/status/677533280300875777)





Exhibit V: Front page of new HFES-GT website (hfes.gatech.edu)

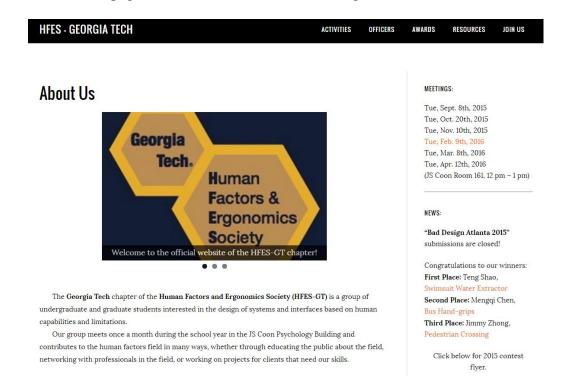


Exhibit W: Updated thank-you tent cards

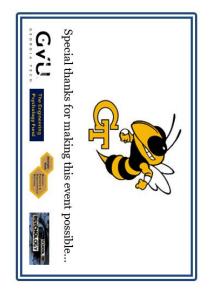




Exhibit X: First two pages of updated officers' calendar

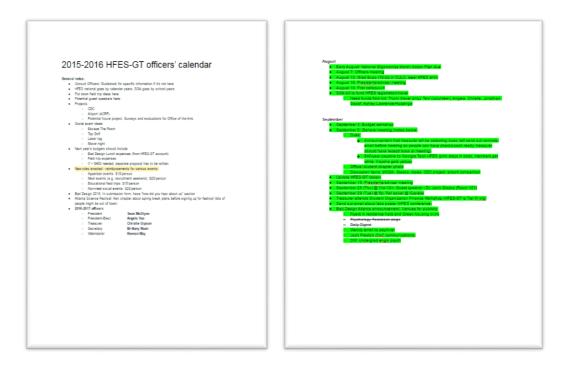
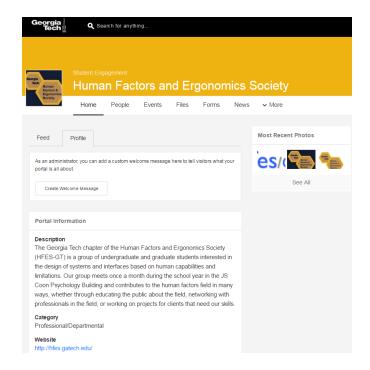


Exhibit Y: HFES-GT home page on OrgSync



LETTER OF ENDORSEMENT (faculty advisor: Dr. Wendy Rogers)



School of Psychology Atlanta, Georgia 30332-0170 U.S.A. PHONE 404-894-2680 FAX 404-894-8905

> Wendy A. Rogers, Ph.D. PHONE 404-894-6775 wendy@gatech.edu www.hfaging.org

May 16, 2016

Linsey Steege, Ph.D. Chair, Student Affairs Human Factors and Ergonomics Society

Dear Linsey,

The purpose of this letter is to support the application of the Georgia Tech HFES Student Chapter for the Gold Level Outstanding Student Chapter Award. I am the faculty advisor for this chapter so I am well aware of their activities. However, they take the initiative for everything they do, making my role as a faculty advisor quite easy.

The level of activity of this student chapter is very impressive. They have provided a detailed list in their application materials. I believe that their level of activity warrants the designation of 'gold' recognition.

They have regular meetings and engage in a number of activities throughout the year. They are also recognized by the community as experts in human factors and called on for their input to design and development issues. In addition, they have become highly sought after as presenters at various events across campus and in the community because they have developed several activities that demonstrate to children of different ages the principles of human factors and ergonomics.

In sum, I am extremely impressed with the level and scope of activities the students have been engaged in for all nine activity categories: recruitment, guest speakers, outreach/volunteerism, collaboration, exploration, social, information dissemination, mentorship, and continuous improvement. Perhaps even more impressive is that all of the officers and members are very active researchers – many of them will be presenting their research at the HFES annual meeting this year and they all are making excellent progress towards their degrees. Their chapter does everything (and more) that a student chapter is intended to do. Not only are the students benefiting tremendously, they are also serving as ambassadors about human factors to society. This year their efforts were extremely impressive in both the breadth and depth of their activities.

Sincerely.

Wendy A. Rogers, Ph.D.

Professor

A Unit of the University System of Georgia

An Equal Education and Employment Opportunity Institution