Application Summary

Competition Details

Competition Title:	2020 CTL/BP Junior Faculty Teaching Excellence Award
Category:	Institutional Awards - CTL
Award Cycle:	2020
Submission Deadline:	03/02/2020 at 11:59 PM

Application Information

Submitted By:	Wei Wang
Appplication ID:	4378
Application Title:	Application for 2020 CTL/BP Junior Faculty Teaching Excellence Award
Date Submitted:	03/02/2020 at 3:29 PM

Personal Details

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Primary School or Department

School of Industrial Design

Primary Appointment Title:	Assistant Professor

Application Details

Proposal Title

Application for 2020 CTL/BP Junior Faculty Teaching Excellence Award

CTL/BP Junior Faculty Teaching Excellence Award Nomination Packet

Wei Wang

Assistant Professor
School of Industrial Design

February 28, 2020

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Georgia Tech | School of Industrial Design
® College of Design

February 24, 2020

Dear CTL Awards and Selection Committee:

**Re: Dr. Wei Wang, Assistant Professor, School of Industrial Design
Nomination for the CTL/BP Junior Faculty Teaching Excellence Award**

I am very pleased to nominate Dr. Wei Wang, an Assistant Professor in the School of Industrial Design, for the CTL/BP Junior Faculty Teaching Award. Dr. Wang was appointed to a tenure-track faculty position as an Assistant Professor as of November 15, 2016. Professor Wang brings a wealth of hands-on experience to our Program and has been instrumental in assisting to reshape our curriculum to more effectively address recent changes in the field of Industrial Design and open doors for new career opportunities for our students in the high profile fields of User Experience Design and Interactive Product Design.

Teaching
Over the past 3 years Dr. Wang has taught mandatory Junior, Senior, and Graduate Industrial Design Studios along with our core lecture-based course in Smart Products at the Sophomore level as well as electives in Interactive Product Design at both the undergrad and graduate levels. He has helped to mentor 10 Master's students and 1 PhD student as primary supervisor plus an additional 8 Master's students and 1 PhD student as co-advisor. He currently supervises 3 MID (Master of Industrial Design) students, 2 MS-HCI-ID (Master of Science in Human-Computer Interaction – ID Stream) students and his first Ph.D. student.

Professor Wang has made several key contributions to the School of Industrial Design curriculum. Of particular importance, he played a strategic role in contributing to a major revision of the curriculum for our Interactive Product Development Stream. As part of this initiative Professor Wang developed three new related classes including our mandatory Sophomore class - ID 2510 *Smart Products*; our core Graduate Studio - ID 6213 *Interactive Design*; and a new Graduate elective course - ID 8803 *Consumer Electronics Design*.

- The original version of the *Smart Products* class had been positioned as an elective for our students at the Junior level. However it had become evident that knowledge of sensor-based 'smart" products was rapidly becoming an essential component of virtually all types of products. Professor Wang graciously took on the challenge to redevelop the course as a mandatory class in our Sophomore curriculum and to teach the introductory offering to our entire Sophomore class simultaneously - 64 students engaged in hands-on sensor-based projects for the first time! The final course projects were a clear testament to the success of the course and a strong showing of the fully operational prototypes were on display in our year-end student "Launchpad" exhibition. Professor Wang presented a Poster exhibit of the work from this course during the CTL event, "*Celebrating Teaching Day 2019*". He also presented a comprehensive overview of the work from this class in a refereed Conference presentation at the "*IDSA (Industrial Design Society of America) Education Symposium*", in 2018.

- The following year Professor Wang undertook a similar task to develop our new *Interactive Design* graduate studio (1 of 2 mandatory studio options) offered to a combined class of MID (Master of Industrial Design) students and MS-HCI (Master of Science of Human-Computer Interaction) students. Once again the class was very successful. The first class worked with the College of Science to produce a set of interactive projects to celebrate "*The International Year of*

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the Periodic Table". The projects were first on exhibit in the Georgia Tech Library Tower and will now be shipped to Europe to be installed and archived (representing Georgia Tech) as part of the national collection of 2019 IYPT (International Year of the Periodic Table) in the Science Museum in London. This course is one of the most popular graduate design studios on the campus.

- The third new course Dr. Wang developed is an advanced level elective course for Masters and PhD students to explore the interdisciplinary theories, application and trends related to consumer electronics design from input peripherals to robots.

This series of new courses has helped enrich the overall level of technical expertise of our program in the areas of Interactive Product Design and User Experience that provide our students with a significant competitive advantage in the fastest growing market segment in the field of Industrial Design.

Building a Bridge between Research & Teaching
Professor Wang has been very active in building a well-focused and productive research track leveraging his background and experience with the application of new sensor-based interactive technologies to investigate opportunities to develop and/or enhance the user experience in three related areas including: the application of interactive technology in underdeveloped communities using codesign and co-creation; the application of interactive technologies in design education; and the application of emerging interactive technologies in future consumer electronics.

He has established and has begun to equip the "DesigNext Lab" in support of his research agenda. He now has a core combined research team of seven students and two visiting scholars working with him. To date he has secured three funded external grants as Principal Investigator that all focus on the application of emerging interactive technologies for future consumer electronics. He has also received 3 internal GT grants including two Faculty Development Grants to support research related to User Experience and the application of VR-enabled driving simulations, as well as a CTL Grant to support new teaching initiatives.

Dr. Wang has encouraged and engaged his students in all of his research endeavors. To date he has co-authored refereed conference presentations and proceedings with 6 of his Georgia Tech students. In addition he has been working to develop of a number of other collaborative research opportunities. He has also been actively cultivating connections in transportation research related to autonomous vehicles and has hosted presentations and lab demonstrations with the BMW User Experience Design Team from Chicago and the Guangzhou Automotive Corporation from Guangzhou, China to showcase the current work ongoing in the DesigNext Lab and discuss potential opportunities for collaboration. Most recently Dr. Wang was awarded a College of Design Faculty Research Fellowship to work with Hanover Associates, a consulting group hired by the College of Design, to work with faculty to help individual faculty members identify and target potential research funding sources.

All of these contacts related to his research have enabled Professor Wang to integrate corporate support of "real world" projects in many of his project studios including:
1. *College of Science sponsored project, ID 6213, Spring 2019*
   - *Project on Interactive Exhibit to celebrate International Year Periodic Table (IYPT) 2019*
2. *Midea Group sponsored project, ID 3051, Fall 2018*
   - *Project on user study and smart small appliance design.*
3. *Tencent sponsored project, ID 3051, Fall 2018*
   - *Project on Social Interaction in VR*
4. *Uisee Automotive Technologies Ltd. sponsored project, ID 6201, Spring 2018*
   - *Project on overnight self-driving coach experience design*
5. *Autodesk sponsored project, ID 4061, Fall 2017*
   - *Project on interactive installation with 3D printing exhibit*
6. *BMW Group sponsored project, ID 3052, Spring 2017*
   - *Project on natural human-machine interfaces design for next generation automobile*

Educational Outreach

In 2018, Dr. Wang initiated a series of summer Design Workshops leveraging his contacts at universities in China as a preliminary step in recruiting prospective candidates for our new MID (Master of Industrial Design) Program that we anticipate will open at the GTSI (Georgia Tech Shenzhen Institute) campus in the Fall of 2022.

- In the Spring of 2018 Dr. Wang and Professor Jim Budd taught a workshop for a large class of students at the South China University of Technology in Guangzhou, China
- In exchange, in the summer of 2018, Professor Wang led a class of twelve international students and two faculty from SCUT (South China University of Technology) in a 3-week summer camp here on the Georgia Tech campus to design and fabricate an operational *"Product with Personality"* with the help of two GT MID students as Teaching Assistants.
- In the Spring of 2019 Professor Wang arranged for another GT faculty member, Professor Steve Chininis, to teach a second workshop, this one focused on the design of children's toys, for students at the South China University of Technology in Guangzhou.
- Then once again, in the summer of 2019, Professor Wang arranged and co-taught eleven international students and one faculty from Jiangnan University in a 3-week summer workshop here on the Georgia Tech campus focused on *Consumer Products with Interactive Technology* again with the involvement and help of two GT MID students as Teaching Assistants.

It should also be noted that one of the projects that was originally developed during the 2018 summer camp, received the prestigious 2019 International Red Dot Design Award for the 'Best of the Best'.

In each of these outreach endeavors Professor Wang has proven to be a most gracious host – He has always taken care to arrange for combined bus & metro passes for our visitors and to personally host an ongoing series of events including tours, picnics, and field trips to local design firms on his own time to ensure our guests have an opportunity to take full advantage of what Is typically their first visit to Georgia Tech and Atlanta.

Summary

In the short time he has been here at Georgia Tech, Professor Wang has already made an outstanding contribution in all facets of his role as a tenure-track faculty member – teaching, research, and service. His new course development has opened new career opportunities for our students. He is extremely well-regarded by his students as a very informative and supportive instructor as witnessed by several "Thanks a Teacher Awards" in both 2018 and 2019. He demands high quality work of his students as reflected by the materials produced by his most recent graduate class focused on the "Year of the Periodic Table" that has been accepted for an exhibition in the Science Museum in London.

Dr. Wang is fully committed to building his career in teaching and research at Georgia Tech. He is a very cheerful, enthusiastic, and ambitious team player. He cares deeply for his students and work tirelessly to ensure they have the best education possible and he continually strives to refine his teaching methods through participation in initiatives such as CTL's "The Class of 1969 Teaching Fellowship" this past year.

In his spare time in 2018 Professor Wang acted as a host for refugee students visiting with Global Village Project run by CEISMC at Georgia Tech. And, while conducting his personal design research in rural China in 2018, he took time out to support the Georgia Tech Shenzhen Institute summer semester students and faculty and to organize filed trips to local corporate and industrial facilities.

The list goes on. He has organized a guest speaker series for our students and has most notably managed to bring in representative from both Google and Facebook to not only give talks to the students for the past two years but to run dedicated workshops as well. In 2018 he also submitted a successful GT Tech Fee grant to acquire state of the art VR equipment to support the use of new technologies for instruction in his design classes and studios for our students throughout the School of Industrial Design.

I have personally had the opportunity to work with Dr. Wang both in the classroom as a co-instructor and together on research projects. He is bright, talented, ambitious, persistent and hard-working – all the elements of a successful teacher. I would highly recommend him for this award.

I would be most happy to answer any further questions you may have.

Sincerely,
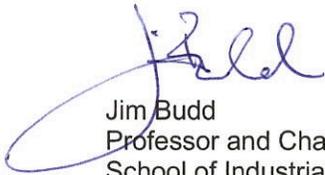
Jim Budd
Professor and Chair
School of Industrial Design

Reflective Statement on Teaching

Wei Wang
Assistant Professor, School of Industrial Design

Teaching Philosophy:

I believe it is critical that students have a strong personal interest and are highly self-motivated to achieve an advanced level in the design world. According to my teaching philosophy, the role of the instructors are more like coaches or mentors who provide their suggestions to help the students explore more, go deeper and become stronger. The students must find their own direction in the early-stage, make the decision in design trade-offs and present it in their own personal way. My advising style is clinical-based and I believe a good mentor should be a good listener firstly, and should always encourage students to explore more based on their curiosity and passion for innovation. I believe this approach is one of the most unique elements required to shape the beautiful form of a good design based on good research. I value the different talents of students in each grade and their feedback in my teaching evaluations. It is my pleasure to mentor my students in their design journey.

Course Design and Development:

When I joined in 2016, our school was in the midst of a rapid growth phase. We more than doubled the undergraduate enrollment and found ourselves short of instructors. I have taught more than 9 different courses from sophomore to graduate in the last three and a half years, including junior studio, senior capstone studio, as well as graduate studio I and II. This experience provided me with a holistic view of the program at different levels along with an understanding of Georgia Tech students' strength, as well as the challenges that remain. During my Class of 1969 Teaching Fellowship, I got the opportunity to discuss and learn teaching skills with colleagues from different background, and reflect how our industrial design program can be benefited from techniques and pedagogy beyond design disciplines. Industrial Design at Georgia Tech has a unique tech-driven DNA, with strong interdisciplinary research and industrial connections, bright students, and excellent alumni. The biggest challenge is how we could tailor the traditional Industrial Design education and curriculum to fit future design trends. As a result, I welcomed the opportunity to create three new courses:

- The new core undergraduate course, ID 2510 Intro to Smart Products, is designed to introduce physical computing, sensor-based technology and smart product design methods to help anchor our new undergraduate sophomore design curriculum. We use Arduino and the opensource hardware eco-system to teach our next generation of industrial designers creative programming, circuit design, and digital making. It is the first "programming, tinkering and hacking" class our undergraduate ID students encounter in their curriculum. The biggest challenge for teaching students with a non-engineering background is how to raise their interest. Luckily, I used to be one of these students too. I use the approach I call "design rethinking after tangible making" that allows students to build and then code a circuit to observe and experiment with the

function, then I introduce the principle and core knowledge behind the phenomenon. To bridge the basic learning of interactive technology to the hands-on design skills they need, we have created a series of mini workshops in the class. The 'Circuit T-shirt Workshop' is designed to introduce conductive materials, gesture interaction and wearable design. The 'Hermit Crab Workshop' takes the notion of making a nice form of the shell to contain the interactive circuit crab inside with a particular function. I also invented a portable 'Sensor Library Suitcase' with sensor samples and cards that I can carry to different classrooms to introduce sensor-based technology. However, it is new learning process for both sides. I received a very low CIOS in the first year (2018) which make me very frustrated but also let me understand which part I should improve. By adjusting some sections to smooth the learning curve, I improved my CIOS. Inspired by this class, more and more ID students dive into the world of interactive product design and digital technology. We have been invited to present the pedagogy and teaching outcomes from this class at the 2018 Industrial Designers Society of America (IDSA) Education Symposium, and we exhibited our sensor library and class posters in 2019 Celebrating Teaching Day.

- The new graduate studio 2, ID 6213 Interactive Products, has been taught to a mixed class of MID and MsHCI students since Spring 2019. My first cohort had a total 21 students which was one of the largest studio classes at that time. I organized the course focus on hands-on skills in user experience (UX) design and advanced product thinking to meet the cutting-edge requirements of tech industries. I have been able to leverage my professional career experience (from user experience researcher, to senior designer, to design lead) in tech companies, to know where we should start to bridge the gap between school education and industrial needs. By creating a systematic framework to develop students' UX competencies, I introduced the pragmatic methods and tools from current industries.

- The new graduate elective ID 8803 Consumer Electronics Design (CED), offered since 2019 Fall, is an advance level graduate course introduces the interdisciplinary theories from Industrial Design, Human-Computer Interaction and interactive technology, application and trends related to consumer electronics design including peripheral device, sensor technologies and artificial intelligence. I mixed several pedagogies in the course to keep a good balance on design thinking and design making, included 30% lecture on reviewing the history and trend of consumer electronics product design, 30% reading and seminar on related theoretic topics, and the rest 40% on two design projects. I received a CIOS 5/5 and two "thanks a teacher" letters from the first cohort of students who come from College of Design, College of Computing and Ivan Allen College.

Enhance Industrial and Interdisciplinary Collaboration in Teaching:

Solving the real-world problem is very important for our future designers. As part of my teaching strategy, I try my best to maintain a strong connection between the classroom and industry. For example, I have invited design experts from Facebook Product Design, BMW Technology, and Microsoft Research to review and discuss the syllabus. To build students' interdisciplinary collaboration skill, I also connected with other schools in Georgia Tech. In my

studio class, we worked with College of Science to create 6 interactive installations to celebrate 2019 International Year of the Periodic Table (IYPT) of Chemical Elements, which are archived by the Science Museum in London. Students were able to benefit from the class structure, the external reviewers, and the invited lectures. With these practices, most of the students from my studio got the summer internships from tech giants like Google, Facebook and Microsoft based on the portfolio projects they created in this studio.

I established the university-industrial connection between Facebook Product Design center and Georgia Tech in 2018 now known as the annual "Facebook Design Day". It is a two-day event when the Facebook team visits our school and works with different studios. The events include a 1:1 design portfolio review run by a Facebook design manager, an invitational design workshop with Facebook designers, and the Facebook Design Tech Talk to introduce the newest design methods, tools and platforms to our students. More than 300 students on the campus benefitted from the event in the past two years. More than 10 students each year have received an internship or full-time offer as a direct result of the event. It also helps our students prepare their job applications to other tech giants.

Other Teaching and Learning Initiatives:

I am always eager to introduce new technology to my classrooms. I applied and successfully received a Technology Fee grant in 2018/19 ($25,595 USD) for the newest eye-tracking enabled VR headset, and introduced VR driven interaction design projects in my undergraduate and graduate studio classes.

In order to increase Georgia Tech's global standing in higher education, I initiated the international summer camp in our school with South China University of Technology in 2018, and with Jiangnan University in 2019. In total, 23 international students and 3 faculty have participated in the past two years for more than three weeks on interactive product design workshops. To underscore the success of the workshops, one of the projects that was originally developed during the 2018 summer camp, received the 2019 International Red Dot Design Award the 'Best of the Best' Prize in Germany. It raises the international reputation of Georgia Tech in design education area.

My other teaching initiative included I advised 6 MID and MsHCI students who all successfully graduated on time and are working in their promising careers in industry. I am now advising 6 graduate students across schools, included my first Ph.D. student on Architecture with Industrial Design concentration, and served on 1 PhD and 8 Master students' committees to enhance our research-driven graduate program in advance level.

Illustrations of Teaching Excellence

1. "Thank a Teacher" Certificates

"Thank a Teacher" Certificate. Center for Teaching and Learning, *November 14, 2018*
Your Name: Savannah
Instructor Name: Wei Wang
Title of the course: Industrial Design 3051
The semester/year of the course: Fall 2018
Campus Address of Instructor: School of Industrial Design/0155
What would you like to tell instructor?
I am grateful for the work that you do for us students. I would not be taking interactive studio if it was not for the Intro to Smart Products class that you taught last spring. You make learning exciting and really push for us to realize our potential. You really seem to love what you do which makes class more interesting and engaging. Thank you for all that you do.

"Thank a Teacher" Certificate. Center for Teaching and Learning, *April 21, 2019*
Your Name: Kim Yen Pham
Instructor Name: Wei Wang
Title of the course: Industrial Design 6213
The semester/year of the course: Spring 2019
Campus Address of Instructor: School of Industrial Design/0155
What would you like to tell instructor?
I really enjoyed being your student! I may not have had delivered the best project, but I appreciate your input. I even appreciate your 9am lectures HAHA. You have such a lovely personality.

"Thank a Teacher" Certificate. Center for Teaching and Learning, *April 22, 2019*
Your Name: Anonymous
Instructor Name: Wei Wang
Title of the course: Industrial Design 6213
The semester/year of the course: Spring 2019
Campus Address of Instructor: School of Industrial Design/0155
What would you like to tell instructor?
Thanks for being a great professor! It's so clear that you actually care about the students and that we learn and grow. That means a lot, especially at this school. I will always consider you one of the best professors I've ever had. Keep on being awesome!

"Thank a Teacher" Certificate. Center for Teaching and Learning, *April 22, 2019*
Your Name: Anonymous
Instructor Name: Wei Wang
Title of the course: Industrial Design 6213
The semester/year of the course: Spring 2019
Campus Address of Instructor: School of Industrial Design/0155
What would you like to tell instructor?

Thank you for all your work this semester. I found your feedback and experience to be extremely informative as I move forward as a student and entering the industry.

"Thank a Teacher" Certificate. Center for Teaching and Learning, *December 13, 2019*
Your Name: Anonymous
Instructor Name: Wei Wang
Title of the course: Industrial Design 8803
The semester/year of the course: Fall 2019
Campus Address of Instructor: School of Industrial Design/0155
What would you like to tell instructor?
Thanks for the well-designed course and inspiring feedback!

"Thank a Teacher" Certificate. Center for Teaching and Learning, *December 13, 2019*
Your Name: Junshu Liu
Instructor Name: Wei Wang
Title of the course: Industrial Design 8803
The semester/year of the course: Fall 2019
Campus Address of Instructor: School of Industrial Design/0155
What would you like to tell instructor?
I enjoy attending Wei Wang's IID 8803 – Consumer Electronics Design course. I've learned a lot from this course, regarding design skills from practices through assignments, as well as design thinkings from the lecture and assigned papers. We can use our creativity to design a product and make a prototype. GOALS ACHIEVED!

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2. Representative Students' Comments from CIOS:
Here are some quotes from my CIOS reports in four categories:

Teaching Style and Methodology
From ID 4061, 2017 Fall: "Pushes students to consider realistic ideas and technology. Brings his industry experience into class. Provides resources to learn more outside of class."

From ID 2051, 2018 Spring: "Really made circuits fun and he has a great sense of humor."

From ID 3051, 2018 Fall: "He really knows what he is doing and talking about. He helps us without telling us what HE wants for a project, but find out what WE want."

From ID 6213, 2019 Spring: "His ability to give effective feedback. Organization of the course criteria and ability to find valuable projects to work on. Trusting us to choose our final projects. Healthy mix of traditional Industrial Design and HCI."

From ID 6213, 2019 Spring: "I like how Wei is approachable and friendly. It really takes the edge off of doing well in studio and gave me the confidence to ask questions and investigate. Wei always seemed eager to teach and demonstrate. For me the level of friendliness and concern for students is a professor's greatest asset."

From ID 6213, 2019 Spring: "The professor took time to get to know each students' strengths and weaknesses over the duration of the course. Because of that, he gave really valuable feedback to us. The projects covered subjects that are valuable in industry. We had a slightly longer amount of time on the final project, which allowed several teams to execute excellent projects that showed a lot of thought and development. I also appreciated him bringing in a guest speaker to talk about VR."

From ID 8803 CED, 2019 Fall: "Wei's feedback on projects was very insightful and helped me to develop as a designer. He is one of very few instructors who examines how I work, and my deliverables, to give thoughtful feedback. He structures the course projects with specific methodologies in mind. This helps us to learn good creative processes for design work. I appreciated his lessons on evaluating the growth and decline of innovative products."

From ID 3051, 2019 Fall: "Professor Wang is very knowledgeable in his subject and passionate about what he teaches. His teaching style is very flexible and allows for students to experiment and grow."

Communication and Enthusiasm

From ID 6200, 2017 Fall: "He listens well to students and understands their projects before he gives feedback. He is also concerned for students schedule and life apart from studio which is really nice. He has a lot of resources and knowledge to contribute."

From ID 3051, 2018 Fall: "Wei seemed very passionate about this subject and was always willing to help us if we were confused or needed more clarity."

From ID 6213, 2019 Fall: "(Instructor greatest strength) Feedback. Wei cares about his students and absolutely wants us to succeed and provides excellent feedback as we go to help us grow."

From ID 6213, 2019 Fall: "Wei is an enthusiastic professor and I love his yellow jacket."

From ID 2051, 2019 Spring: "Wei is a really cool dude and seems really interested in what his students are doing. I would take another class with him."

From ID 2051, 2019 Spring: "Very enthusiastic teacher and very sweet and approachable and very knowledgeable on the material."

From ID 8803 CED, 2019 Fall: "Very straight forward and honest. Pretty funny at times and has prior knowledge on subject matter and is very insightful. Very demanding and expects high quality work, pushes students to present best work."

From ID 3051, 2019 Fall: "Respect for students and thoughtfulness of approach."

Care for Students' Learning

From ID 3052, 2017 Spring: "A genuine care and concern for the work the students were producing."

From ID 4061, 2017 Fall: "He is very knowledgeable on the subjects he loves which makes learning a lot more exciting. He is very good at making each person's project personal and helping them individually. I learn a lot while talking to Professor Wei and feel like he really wants to help me learn and succeed. You can really tell how much he cares about students. He even gives us articles, specific tasks to help us, and much more!"

From ID 6201, 2018 Spring: "Wei cares about his students and gives thoughtful feedback. He made it clear through the semester he was there for class support but also offered his advice on personal portfolios and professional improvement."

From ID 3051, 2018 Fall: "Ability to inspire me to work towards future industry goals. You're always available for a review or a design talk and more … it's clear Wei wants to be there."

From ID 2051, 2019 Spring: "I can tell that he cares for his students and their success in the class, and he delivers great feedback (especially the one in Canvas)"

From ID 3051, 2019 Fall: "He truly was interested in our portfolios and our career path, which is something not a lot of professors go out of their way to do."

Course Design and Content
From ID3052, 2017 Spring: "We got to do some extremely interesting projects, and got to work with some very important clientele."

From ID 6200, 2017 Fall: "Real world insight and very specific steps to improving myself as a designer. Discussed my career goals and gave some great advice on what steps I needed to take to reach them."

From ID 6213, 2019 Spring: "I like the scale of the projects, i think they were a good enough timeline to complete everything and it wasn't overwhelming. Also for me whats most important is the balance of the workload. I think the scope of the projects were not too much to the point of being stressed and overwhelmed but at the same time it facilitated learning and a challenge. I liked working in teams I think that was the best part about these projects. I also loved the one on one feedback and one on one sessions. I personally learn from that more than whole class discussions. I think the number of class discussions/presentations were perfect for this class (once a project not including final presentation) just because I already talk to classmates about what their projects are and devoting time to discussing everyones project that doesnt relate to mine isn't a good way to spend class time so i much rather prefer having one on one sessions."

From ID 2051, 2019 Spring: "This was my favorite class that I took this entire year. I thoroughly enjoyed learning not just how to use Arduino, or Processing but also the bigger world of smart products as a whole, different trends, history, technology, etc. We had a variety of different teaching methods (lectures, demos, projects, assignments, quizzes, etc). I feel like this class has single-handedly expanded my designer toolkit the most out of any class I've taken yet and it has expanded my interest in interaction design and smart products as well as user interaction even more."

From ID 3051, 2019 Fall: "Awesome flexibility to work on projects that are meaningful to my career development. The closest class I have taken so far to the kind of work I want to do professionally."

From ID 8803 CED, 2019 Fall: "This course was a great learning experience. I learned about influential designers in HCI and computing. it was a very good overview of the methodologies for designing new electronics products. There were periods when i thought the rigor of the course was heavier than some studio courses that I've taken, especially since we only had around 2.5 hours for class time per week. however it was a very valuable learning experience for me, and I learned something good from each of the activities."

**3. Admitted to the Georgia Tech Class of 1969 Teaching Fellow (2018) program by the Center for Teaching and Learning**

4. Student success beyond the classrooms
4.1 The ID 6213 2019 Spring student project "Periodic Table Makeover", collaborated with College of Science, delivered six interactive exhibits and a book.

Reference: "Industrial design students reimagine the periodic table – and a book is born"
https://cos.gatech.edu/hg/item/621467

Exhibited as a part of the exhibit ASTOUNDING ELEMENTS: Celebrating the Periodic Table at Georgia Tech Library, Crosland Tower since November 2019.
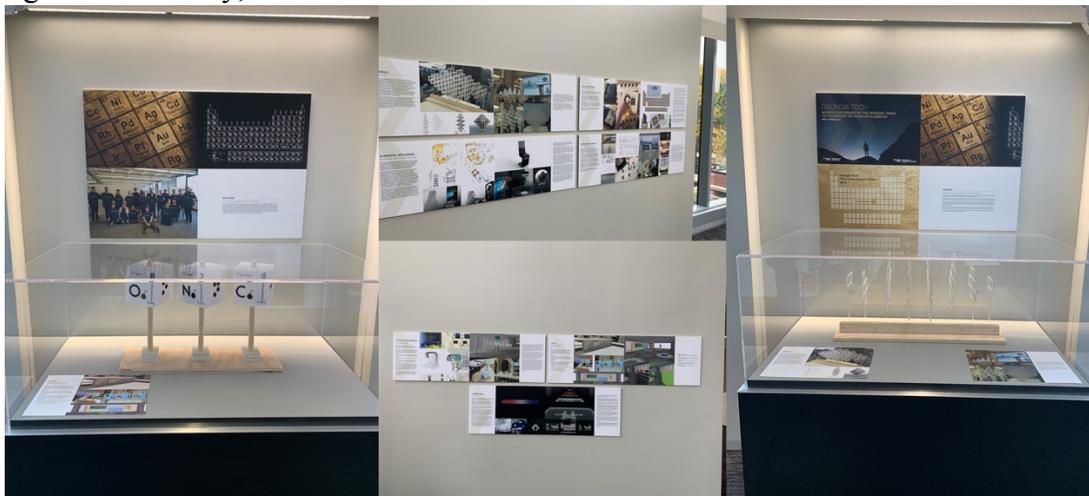
The book with all students' works behalf of Georgia Tech has been selected to **the national collections of 150 years of the Periodic Table** exhibited and archived in **the Science Museum in London** (https://www.sciencemuseum.org.uk/)

4.2 Advise the undergraduate team to attend Create-X Idea to Prototype (I2P) 2018/19: Omari Hitson (ID), Emanuel Solis (CS), Meredith Caveney (ECE), Akhila Ballari (CS), on the project "ÅX Full Frame Camera Smartphone Attachment", **received 2nd Place** in the CREATE-X Idea to Prototype competition and presented their work in the GT Spring Undergraduate Research Symposium for 2019.

4.3. Advise independent study Omari Hitson (Class of 2020 ID) and Jack MacLeod (Class of 2021 ID) of undergraduate research, received **College of Design Dean's List** scholarship.

4.4 Until the end of 2019, Dr. Wang has advised 6 MID and MsHCI students who all successfully graduated on time and are working in their **promising careers in information technology and consumer electronics industries**:

- Manasee Narvilkar (MsHCI-DM), Senior Interaction Designer, Samsung, Bangalore, India
- Ruturaj Eksambekar (MsHCI-IC), User Experience Designer at Lucid Software, Salt Lake City, Utah
- Zhangyan Ling (MID), Associate UI Designer, GE Appliance, Louisville, Kentucky
- Pranav Nair (MID), User Researcher, Microsoft, Seattle, WA
- Hongnan Lin (MID), continue PhD study in Georgia Tech
- Lisi Zhu (MID), User Experience Designer, FastSpring Co., Santa Barbara, CA

5. Education Impact and Service

5.1 In August 2019, selected as one of seven presenters and the one behalf of Georgia Tech, presented the teaching innovation and joined the panel discussion in 2019 national IDSA Education Symposium:

Aaron Kurosu, IDSA
Princeton University
"Design Science: An empirical and quantitative approach"

Alex Lobos, IDSA
Rochester Institute of Technology
"Tangible Sketching with 3D Printing" with Co-Authors

Eric Schneider, IDSA
Thomas Jefferson University
"Industrial Design and Occupational Therapy"

Liana Charles, IDSA
Newell Brands
"History Can Shape Our Future"

Paul Skaggs, IDSA
Brigham Young University
"Tolerance for Ambiguity"

Thomas Cline, IDSA
University of Louisiana at Lafayette
"Looking Back: The Foundations of Design Education"

Wei Wang, IDSA
Georgia Institute of Technology
"Grounding Experience: Empathizing in Future Service Design"

5.2 Advocate "UN SDGs and Design" in the campus at Georgia Tech and Georgia State University Atlanta Global Studies Center (AGSC):

Georgia | School of
Tech | Industrial Design
College of Design

24 February, 2019

Junior Faculty Teaching Excellence Award
Center for Teaching and Learning
Georgia Institute of Technology

Dear Award Committee,

I am writing to give my strongest support to Assistant Professor Dr. Wei Wang for consideration of the CTL/BP Junior Faculty Teaching Excellence Award. I am the Undergraduate Program Coordinator and Senior Lecturer in the Georgia Tech School of Industrial Design. I have had the pleasure of working with Dr. Wang since he joined the School almost four years ago in the fall of 2016. From my position as Undergraduate Coordinator, I will primarily discuss Dr. Wang's impact on our undergraduate students.

Dr. Wang made a positive impact almost immediately upon joining the School. He has endeared himself to the undergraduate students and built a strong and positive rapport with those he teaches. He has been a pleasure to work with as a teaching colleague and from my view as Program Coordinator, he has been a strong team member of the School. His subject matter expertise, organization, and ability to inspire and foster students' personal pride in their projects have made him an indispensable member of our faculty.

Dr. Wang has developed courses that are core to our undergraduate curriculum. Five years ago, we overhauled our entire undergraduate curriculum. His arrival into our program during that time led to the development of the Smart Products course (ID 2051). This course is required for all sophomore-level industrial design students as it introduces sensor-based technologies and applications early in their academic career and gives them the skills to realize complex interactions and the ability to fabricate functional product models – skills that give our students a clear advantage over other schools in prototyping design concepts. Wei has made a subject which used to be foreign and intimidating to design students (sensors, sensor-based technology and coding) and instead has grown comfort, ownership and excitement around the technology.

Wei also developed the current version of our junior-level Interactive Products Studio. This studio is a core part of the sequence taken by our students who wish to pursue careers in embodied interactive technology or user experience (UX). Once a sparsely attended studio, Wei has built it into one of our most popular studio courses. In this studio, he has connected students to major companies through sponsored and engaging projects, including BMW and Facebook. The project outcomes of the BMW project, in particular, I share with all incoming FASET students and prospective HS students alike, and it consistently builds intrigue in our program from those students. The work his Interactive Products Studio produces serves as a major indicator of the high level of projects our undergraduate ID students are able to complete compared to other ID schools. These teaching accomplishments are backed up by excellent CIOS scores.

Beyond the classroom, Dr. Wang has had further nurtured our students through accessibility and coaching. He is readily available to speak with students and I often find him engaged in energetic hallway conversations. The students have come to see Dr. Wang as a "go-to" resource for subject expertise and as a trusted mentor. He is always willing to lend a hand and does so with a smile. He mentored undergraduate students developing a smartphone camera attachment through the Idea-to-Prototype (I2P)

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and Create-X programs. They recently presented at the Undergraduate Research Symposium and in the I2P Showcase – where the team won Second Place! Additionally, he won three "Thank a Teacher" honors in the spring of 2019.

Additionally, Wei has had positive impact on the School of Industrial Design as a whole. He was instrumental in securing a $25,595 technology fee grant and chairs our guest lecture committee, which has brought respected and inspiring researchers and practitioners from across the design spectrum to the School of Industrial Design. Our lecture program was waning until Dr. Wang took the lead and reinvigorated this important discussion series. Further, he has presented papers about undergraduate design education innovation at Georgia Tech and participated on a panel discussion at the annual Industrial Designers Society of America (IDSA) Education Symposium at the International Design Conference. These presentations and engagement with IDSA have served to elevate the reputation of Georgia Tech's School of Industrial Design amongst design faculties.

Given Dr. Wei Wang's demonstrated effectiveness as explained above, my observation of his teaching and mentoring practices, and along with his character and dedication to design education at Georgia Tech, I strongly recommend him for the 2020 CTL/BP Junior Faculty Teaching Excellence Award.

Sincerely,

Kevin D. Shankwiler, IDSA
Undergraduate Program Coordinator
Georgia Tech School of Industrial Design
e: kshankwiler@gatech.edu

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To whomsoever it may concern,

I am writing this letter in support of Dr. Wei Wang for the CTL/BP Junior Faculty Teaching Excellence Award. I am a current Master's in Industrial Design student at Georgia Tech and have known Dr. Wang for almost two years. I took two of his classes that he taught in College of Design related to Interactive Product Design. I also worked for Dr. Wang as a Graduate Teaching Assistant for a sophomore design class (60+ students) that he taught last Spring with his colleague Prof. Yaling Liu. His classes were some of the most organized classes I have ever taken. I really appreciate how both his classes made me really question the need for a smart product design and understand the impact of proper background research.

He is very good at understanding what each student needs based on their interests and projects, and tailors his advice and feedback based on that understanding. I personally was more interested in doing a research project about social robots for my studio than a traditional design project. He guided me using his research experience in Human Robot Interaction and provided me with the resources to help me work towards a successful project. I feel that his method of one-on-one discussions works really well for the students, allowing him to focus on individual project development, even in a class as large as 60 students. He is very accommodating of student requirements and strives to do an even better job at the next opportunity he gets.

Beyond classroom teaching, Dr. Wang has helped me make career decisions by giving me helpful advice whenever I have approached him. Based on my experience of studying in his classes as well as working for him as a Graduate Teaching Assistant, I definitely think that Dr. Wang deserves appreciation for his hard work and dedication towards teaching and student well-being. The CTL/BP Junior Faculty Teaching Excellence Award would be a really good way to do that.

Sincerely,

Himani Deshpande
Masters in Industrial Design Student
Georgia institute of Technology

February 18, 2020
CTL/BP Junio Faculty Teaching Excellence Award

To the Selection Committee,

My name is Chermia Mathis and I am a fifth year Industrial Design major at Georgia Tech. I am writing this letter in full support of the 2020 award nomination for Professor Wei Wang. I have taken two of Professor Wang's courses offered through the College of Design and have thoroughly enjoyed and appreciated the material and knowledge that he shared with the class.

Professor Wang has been one of my favorite professors throughout my time at Georgia Tech. He taught every class with a smile which always demonstrated to me his passion in the course subjects, and the pride he had in us as students in the work we were all producing because of the information he taught. Professor Wang has a way of being able to connect with students that makes you want to participate and improve upon your own performance.

In the Introduction to Smart Products course, Professor Wang gave amazing feedback. Whenever I felt lost in the class, or unsure of the direction to go, he was always able to guide me in the right direction. He inspired me to want to tinker and explore the opportunities that existed within basic Arduino Kits to create things that I previously had no idea how to go about starting. Due to what I learned in that class, I registered for his Interactive Product Studio the following semester. This class helped me get a better understanding of the direction that I believe I want to take me career into. He stressed the importance of research and receiving constant user feedback on projects. He gave me more exposure to AR/VR software, interface prototyping, and interactive designing. He never dismissed ideas and was able to help us individually parse through that collected research and information in ways that would help us successfully push our own project ideas forward. He has left lasting impressions on me that has inspired me to want to reapply for graduate school education in the same field that he has shown depth of knowledge in.

Professor Wang has also stuck out to me as a professor who is very considerate and sets out to talk with and understand his students, ensuring that their voices are heard. I have had conversations in his office about my future plans and how I personally seek to assist my community both on and off campus. These conversations are what I believe led him to nominate me for my current position as an undergraduate representative on the Diversity & Inclusion Council for the College of Design. Being an African American student, I have been presented some challenges along my journey. Professor Wang genuinely wanted to understand my story and help me overcome those obstacles to achieve some of my goals. We are all very different people with different stories, but he has proven to me to be someone who cares and wants to see us all succeed.

Professor Wang is an excellent teacher that has offered guidance to get me through these past couple of years, both on a personal and academic level. I believe he deserves to receive this award after witnessing his passion and dedication to his students, therefore, I ask that this committee strongly consider this recommendation.

Best,

Chermia Mathis
Undergraduate – College of Design
5th Year Industrial Design

Dear CTL and BP America Selection Committee,

My name is Maria Longoria and I am writing on behalf of Dr. Wei Wang regarding the Junior Faculty Teaching Excellence Award. I have had the honor of working closely with Dr. Wang as my professor for two industrial design classes: Introduction to Smart Products (ID 2510) and Interactive Studio (ID 3051). From my three years at Georgia Tech, I can truly say that Dr. Wang is one of the best professors I have had.

Dr. Wang's love for teaching is clearly apparent through his enthusiastic personality and constant effort to help me grow as a designer. I have never experienced a moment where I am afraid to ask a question or go to Dr. Wang for help on a project. During studio, Dr. Wang fosters an interactive environment where students can openly express their thoughts, feelings, and ideas, however crazy they may be. Feedback is critical in designing and I found that the kind of studio environment Dr. Wang fosters is extremely helpful in design progress. I believe Dr. Wang is passionate about what he teaches and his research field in UI/UX. Dr. Wang always made his best effort to tailor his lectures to help us in areas where we demonstrated the most need for guidance during our design journey. Many times, professors are on a tight schedule for the content they are going to discuss but Dr. Wang is flexible in rearranging his material schedule to fit the needs of his students.

I believe what sets Dr. Wang apart from other professors is his accessibility. For example, Dr. Wang went the extra mile to help us with our portfolios and develop our long-term goals as an industrial designer. Dr. Wang has devoted many hours outside of the classroom setting up meetings with us individually to discuss our career aspirations and actionable steps in order for us to get to where we want to be. Dr. Wang even had an entire lecture about the different job opportunities UI/UX had to offer. This allowed me to reevaluate my career goals and opened my eyes to other areas I may be interested in pursuing. Additionally, I believe how Dr. Wang operated his studio is extraordinary compared to others because of the fact he allowed students to choose their own projects based on an area they were most passionate about. This allowed us to be able to tailor the project to fit our portfolio and actually be excited about designing the project, rather than being forced to because of a defined project prompt.

I've seen Dr. Wang excel in teaching both large scale and smaller classroom settings. Intro to Smart Products is a class composed of 75+ students whereas studio typically has less than 25 students. Even in a large classroom setting, Dr. Wang has been effective in teaching me lessons that I can apply to my academic and professional career. I strongly believe Dr. Wang has earned this prestigious award and would be happy to discuss further how Dr. Wang has impacted my design journey. Please do not hesitate to contact me if there is anything else I can offer in Dr. Wang's support.

Sincerely,

Maria L. Longoria
Maria L. Longoria
m.longoria@gatech.edu

School of Industrial Design
College of Design
Georgia Institute of Technology

Re: A Recommendation For A Very Deserving Professor

Weinsheimer, Joyce <joyce.weinsheimer@gatech.edu>
Tue 3/3/2020 4:21 PM

To: Hitson, Omari I <nicco@gatech.edu>
Cc: Wang, Wei <wei.wang@design.gatech.edu>; Sullivan, Carol S <csubino@gatech.edu>

We can include your letter! Thanks for sending it....Joyce

Dr. Joyce Weinsheimer, Director
Center for Teaching and Learning
Clough Undergraduate Learning Commons, Suite 457
Georgia Institute of Technology
Atlanta, GA 30332-0383
404-894-2340

From: Hitson, Omari I <nicco@gatech.edu>
Sent: Tuesday, March 3, 2020 4:02 PM
To: Weinsheimer, Joyce <joyce.weinsheimer@gatech.edu>
Cc: Wang, Wei <wei.wang@design.gatech.edu>
Subject: A Recommendation For A Very Deserving Professor

Good afternoon Ms. Weinsheimer,

My name is Omari Hitson, a fourth year industrial design student at the college of design. It is my understanding that the entries for the Junior Faculty Teaching Excellence Award were due on yesterday. For this reason I am emailing to inquire if I might be able to pass onto you a recommendation for a Professor who likely entered on yesterday.

Professor Wang Wei of the college of design is an absolutely outstanding professor. He requested that I submit a letter of recommendation for him however over the past few days, I allowed a number of midterms to allow me to forget to send his recommendation letter before his stated deadline. This was entirely an error on my part however, I believe professor Wei is an absolutely exceptional candidate for this award and I would hate for him to have any less than the recognition he deserves due to my own disorganized schedule.

Is there anyway that you might be able to include this additional letter of recommendation into his profile as well? As always, thanks so much for your patience an assistance and I thoroughly look forward t your reply.

Cheers,
Omari Hitson