

Curriculum Vitae

Rong-Hao Liang

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Dr. Rong-Hao Liang is assistant professor in Department of Industrial Design and Department of Electrical Engineering, Eindhoven University of Technology, the Netherlands. Rong-Hao received his Ph.D. in Computer Science (2014) from National Taiwan University, M.S. in Electrical Engineering (2010) from National Taiwan University, B.S. in Computer Science (2014) from Chang Gung University. He found a company, GaussToys Inc., in Taiwan (2015). From Dec. 2014 until Sep. 2016 he was an assistant research fellow in Intel-NTU Research Center of Connected Context Computing, National Taiwan University. He has served as a member of ACM DIS, ACM UIST, ACM EICS and DeSForM conference program committees. He also served as a member of ACM CHI, ACM UIST and ACM TEI conference program committees. His research focus on Technical Human-Computer Interaction in innovative and intelligent sensing, ubiquitous computing, and rapid prototyping. Until 2020 he has more than 50 technical research publications and held several user interface hardware patents.

Outstanding Achievements: His research awarded ACM DIS 2020 Best Paper Honorable Mention, ACM UIST 2016 Best Talk Award, IICM 2015 Best Ph.D. Thesis Honorable Mention, ACM CHI 2014 Best Paper Honorable Mention, ACM CHI 2014 People's Choice Best Talk Award, ACM CHI 2013 Best Paper Award, ACM SIGGRAPH Asia 2012 Emerging Technologies Award.

Expertise Areas: User Interface Software and Technologies; Human-Computer Interaction; Ubiquitous Computing; Sensor Technology; Interaction Design.

Google Scholar: H-index=16, i10-index=18, #citations=899 (until Jul. 15, 2020)

LinkedIn: <https://www.linkedin.com/in/rong-hao-liang-33275351/>

Experiences

- **Assistant Professor (Tenured)** *Oct. 2016 – now*
Department of Industrial Design, Eindhoven University of Technology, The Netherlands
Department of Electrical Engineering, Eindhoven University of Technology, The Netherlands
- **Co-Founder** *Mar. 2015 – now*
GaussToys Inc., Taiwan
- **Assistant Research Fellow** *Dec. 2014 – Sep. 2016*
Intel-NTU Connected Context Computing Center, National Taiwan University, Taiwan
- **Research Assistant** *Apr. 2010 – Dec. 2014*
Institute of Information Science, Academia Sinica, Taiwan

Education

- **Doctor of Philosophy (Ph.D.)** *Sep. 2011 – Oct. 2014*

Graduate Institute of Networking and Multimedia, National Taiwan University, Taiwan

Thesis: GaussTUIKit - Designing Portable and Seamless Tangible Interactions Using Magnetics
(Advisor: Dr. Bing-Yu Chen)

- **Master of Science (M.S.)** *Sep. 2008 – Jun. 2010*

Department of Electrical Engineering, National Taiwan University, Taiwan

Thesis: Utilizing Everyday Objects as Additional, Auxiliary and Instant Tabletop Controllers
(Advisor: Dr. Sy-Yen Kuo)

- **Bachelor of Science (B.S.)** *Sep. 2003 – Jun. 2007*

Department of Computer Science, Chang Gung University, Taiwan

Publication

Selected Papers in International Conference Proceedings and Journals

1. Siti Aisyah binti Anas, **Rong-Hao Liang**, Jun Hu, Matthias Rauterburg. 2020. *Designing Proactive Objects with Artificial Eyes Based on Perceptual Crossing Paradigm*. In **Proceedings of IEEE International Conference on Robot & Human Interactive Communication (IEEE RO-MAN '20)**, 8 pages (to appear), Naples, Italy.
2. Maas Goudswaard, Abel Abraham, Bruna Goveia da Rocha, Kristina Andersen, **Rong-Hao Liang**. 2020. *FabriClick: Interweaving Pushbuttons into Fabrics Using 3D Printing and Digital Embroidery*. In **Proceedings of the 2020 ACM Designing Interactive Systems Conference (DIS '20)**, pp. 379–393, Eindhoven, the Netherlands. **[DIS 2020 Best Paper Honorable Mention]**
3. Annemiek Veldhuis, **Rong-Hao Liang**, Tilde Bekker. 2020. *CoDa: Collaborative Data Interpretation Through an Interactive Tangible Scatterplot*. In **Proc. ACM TEI 2020**, pp. 323–336, Sydney, Australia.
4. Meng-Ju Hsieh, Jr-Ling Guo, Chin-Yuan Lu, Han-Wei Hsieh, **Rong-Hao Liang**, Bing-Yu Chen. 2019. *RFTouchPads: Batteryless and Wireless Modular Touch Sensor Pads Based on RFID*. In **Proc. ACM UIST 2019**, pp. 999-1011, New Orleans, LA, USA.
5. **Rong-Hao Liang**, Shun-Yao Yang, Bing-Yu Chen. 2019. *InDexMo: Exploring Finger-Worn RFID Motion Tracking for Activity Recognition on Tagged Objects*. In **Proc. ACM ISWC 2019**, pp. 129--134, London, UK.
6. Mengru Xue, **Rong-Hao Liang**, Bin Yu, Mathias Funk, Jun Hu, Loe M.G. Feijs 2019. *AffectiveWall: Collective Stress-Related Physiological Data Visualization for Reflection*. In **IEEE Access Journal**, pp. 131289-131303.
7. **Rong-Hao Liang**, Meng-Ju Hsieh, Jheng-You Ke, Jr-Ling Guo, Bing-Yu Chen. 2018. *RFIMatch: Batteryless, Distributed Near-Field Identification Using RFID-Tagged Magnet-biased Reed Switches*. In **Proc. ACM UIST 2018**, pp.473—483, Berlin, Germany.

8. **Rong-Hao Liang**, Bin Yu, Mengru Xue, Jun Hu, Loe M.G. Feijs. **2018**. *BioFidget: Biofeedback for Respiration Training Using an Augmented Fidget Spinner*. In **Proc. ACM CHI 2018**, Article 613, 12 pages, Montreal, Canada.
9. Meng-Ju Hsieh, **Rong-Hao Liang**, Da-Yuan Huang, Jheng-You Ke, Bing-Yu Chen. **2018**. *RFIBricks: Interactive Building Blocks Based on RFID*. In **Proc. ACM CHI 2018**, Article 189, 10 pages, Montreal, Canada.
10. Bin Yu, Jun Hu, Mathias Funk, **Rong-Hao Liang**, Mengru Xue, Loe M.G. Feijs. **2018**. *RESonance: Lightweight, Room-Scale Audio-Visual Biofeedback for Immersive Relaxation Training*. In **IEEE Access Journal**, pp. 38336--38347.
11. Mengru Xue, **Rong-Hao Liang**, Jun Hu and Loe Feijs. **2017**. *ClockViz: Designing Public Visualization for Coping with Collective Stress in Teamwork*. In **Proc. DeSFORM 2017**, Article 5, Eindhoven, The Netherlands.
12. **Rong-Hao Liang**, Han-Chih Kuo, Bing-Yu Chen. **2016**. *GaussRFID: Reinventing Physical Toys with Magnetic RFID Kits*. In **Proc. ACM CHI 2016**, pp.4233--4237, San Jose, CA, USA.
13. Han-Chih Kuo, **Rong-Hao Liang**, Long-Fei Lin, Bing-Yu Chen. **2016**. *GaussMarbles: Spherical Magnetic Tangibles for Interacting with Portable Physical Constraints*. In **Proc. ACM CHI 2016**, pp.4228--4232, San Jose, CA, USA.
14. Da-Yuan Huang, Liwei Chan, Shuo Yang, Fan Wang, **Rong-Hao Liang**, De-Nian Yang, Yi-Ping Hung, Bing-Yu Chen. **2016**. *DigitSpace: Designing Thumb-to-Fingers Touch Interfaces for One-handed and Eyes-free Interactions*. In **Proc. ACM CHI 2016**, pp.1526--1537, San Jose, CA, USA.
15. Chiuang Wang, Hsuan-Ming Yeh, Bryan Wang, Te-Yen Wu, Hsin-Ruey Tsai, **Rong-Hao Liang**, Yi-Ping Hung, Mike Y. Chen. **2016**. *CircuitStack: Supporting Rapid Prototyping and Evolution of Electronic Circuits*. In **Proc. ACM UIST 2016**, pp.687--695, Tokyo, Japan. **[UIST 2016 Best Talk Award]**
16. Yi-Chi Liao, Yi-Ling Chen, Jo-Yu Jo, **Rong-Hao Liang**, Liwei Chan, Bing-Yu Chen. **2016**. *EdgeVib: Effective Alphanumeric Output Using a Wrist-Worn Tactile Display*. In **Proc. ACM UIST 2016**, pp.595--601, Tokyo, Japan.
17. Meng-Ju Hsieh, **Rong-Hao Liang**, Bing-Yu Chen. **2016**. *NailTactors: Eyes-Free Spatial Output Using a Nail-Mounted Tactor Array*. In **Proc. ACM MobileHCI 2016**, pp. 29--34, Florence, Italy.
18. Chin-Yu Chien, **Rong-Hao Liang**, Long-Fei Lin, Liwei Chan, Bing-Yu Chen. **2015**. *FlexiBend: Enabling Interactivity of Multi-Part, Deformable Fabrications Using Single Shape-Sensing Strip*. In **Proc. ACM UIST 2015**, pp.659--633, Charlotte, NC, USA.
19. Liwei Chan, Yi-Ling Chen, Chi-Hao Hsieh, **Rong-Hao Liang**, Bing-Yu Chen. **2015**. *CyclopsRing: Enabling Whole-Hand and Context-Aware Interactions Through a Fisheye Ring*. In **Proc. ACM UIST 2015**, pp.549--556, Charlotte, NC, USA.
20. **Rong-Hao Liang**, Chao Shen, Yu-Chien Chan, Guan-Ting Chou, Liwei Chan, De-Nian Yang, Mike Y.

- Chen, Bing-Yu Chen. **2015**. *WonderLens: Optical Lenses and Mirrors for Tangible Interactions on Printed Paper*. In **Proc. ACM CHI 2015**, pp.1281–1284, Seoul, Korea.
21. Liwei Chan, Chi-Hao Hsieh, Yi-Ling Chen, Shuo Yang, Da-Yuan Huang, **Rong-Hao Liang**, Bing-Yu Chen. **2015**. *Cyclops: Wearable and Single-Piece Full-Body Gesture Input Devices*. In **Proc. ACM CHI 2015**, pp.3001–3010, Seoul, Korea.
 22. Hung-Yu Tseng, **Rong-Hao Liang**, Liwei Chan, Bing-Yu Chen. **2015**. *LEaD: Utilizing Light Movement as Peripheral Visual Guidance for Scooter Navigation*. In **Proc. ACM MobileHCI 2015**, pp. 323–326, Copenhagen, Denmark.
 23. **Rong-Hao Liang**, Han-Chih Kuo, Liwei Chan, De-Nian Yang, Bing-Yu Chen. **2014**. *GaussStones: Shielded Magnetic Tangibles for Multi-Token Interactions on Portable Displays*. In **Proc. ACM UIST 2014**, pp.365–372, Honolulu, Hawaii, USA.
 24. **Rong-Hao Liang**, Liwei Chan, Hung-Yu Tseng, Han-Chih Kuo, Da-Yuan Huang, De-Nian Yang, Bing-Yu Chen. **2014**. *GaussBricks: Magnetic Building Blocks for Constructive Tangible Interactions on Portable Displays*. In **Proc. ACM CHI 2014**, pp.3153–3162, Toronto, ON, Canada. [**CHI 2014 Best Paper Honorable Mention & CHI 2014 People's Choice Best Talk Award**]
 25. Liwei Chan, **Rong-Hao Liang**, Ming-Chang Tsai, Kai-Yin Cheng, Chao-Huai Su, Mike Y. Chen, Wen-Huang Cheng, Bing-Yu Chen. **2013**. *FingerPad: Private and Subtle Interaction Using Fingertips*. In **Proc. ACM UIST 2013**, pp.255–260, St Andrews, United Kingdom.
 26. **Rong-Hao Liang**, Kai-Yin Cheng, Liwei Chan, Chuan-Xhyuan Peng, Mike Y. Chen, Rung-Huei Liang, De-Nian Yang, Bing-Yu Chen. **2013**. *GaussBits: Magnetic Tangible Bits for Portable and Occlusion-Free Near-Surface Interactions*. In **Proc. ACM CHI 2013**, pp.1391–1400, Paris, France.
 27. Chao-Huai Su, Liwei Chan, Chien-Ting Weng, **Rong-Hao Liang**, Kai-Yin Cheng, Bing-Yu Chen. **2013**. *NailDisplay: Bringing an Always-Available Visual Display To Fingertips*. In **Proc. ACM CHI 2013**, pp.1461–1464, Paris, France. [**CHI 2013 Best Paper Award**]
 28. **Rong-Hao Liang**, Kai-Yin Cheng, Chao-Huai Su, Chien-Ting Weng, Bing-Yu Chen, De-Nian Yang. **2012**. *GaussSense: Attachable Stylus Sensing Using Magnetic Sensor Grid*. In **Proc. ACM UIST 2012**, pp.319–326, MA, USA.
 29. Shu-Yang Lin, Chao-Huai Su, Kai-Yin Cheng, **Rong-Hao Liang**, Tzu-Hao Kuo, Bing-Yu Chen. **2011**. *PUB - Point Upon Body: Exploring Eyes-Free Interaction and Methods on an Arm*. In **Proc. ACM UIST 2011**, pp.481–488, Santa Barbara, USA.
 30. Kai-Yin Cheng, **Rong-Hao Liang**, Bing-Yu Chen, Rung-Huei Liang, Sy-Yen Kuo. **2010**. *iCon: Utilizing Everyday Objects as Additional, Auxiliary and Instant Tabletop Controllers*. In **Proc. ACM CHI 2010**, pp.1155–1164, Atlanta, Georgia, USA.

International Conference Demos, Posters

1. Wouter van der Woude, Daniel Tetteroo, and **Rong-Hao Liang**. 2020. *Presley: Designing Non-Obtrusive Tactile Rhythmic Wearable Devices for Improving Speech Fluency*. In **DIS' 20 Provocations and Work-In-Progress**, pp. 97–103, Eindhoven, the Netherlands.
2. Tyana Hendriksma, Joanne Maartense, Rosanne de Feyter, Rong-Hao Liang, and Loe Feijs. 2020. *Designing Interactive Clothing to Raise Awareness of and Comfort the Wearer Suffering from Anxiety*. In **DIS' 20 Provocations and Work-In-Progress**, pp. 25–29, Eindhoven, the Netherlands.
3. Meng-Ju Hsieh, **Rong-Hao Liang**, Jr-Ling Guo, Bing-Yu Chen. **2018**. RFIDesk: An Interactive Surface for Multi-Touch and Rich-ID Stackable Tangible Interactions. In **ACM SIGGRAPH Asia 2018 Emerging Technologies Demo**, Tokyo, Japan.
4. **Rong-Hao Liang**, Bin Yu, Mengru Xue, Jun Hu, Loe M.G. Feijs. **2018**. BioFidget Demo: Biofeedback for Respiration Training Using an Augmented Fidget Spinner. In **ACM CHI 2018 Demo and Video Showcase**, Montreal, Canada.
5. **Rong-Hao Liang**, Han-Chih Kuo, Miguel Bruns Alonso, Bing-Yu Chen. **2016**. *GaussStudio: Designing Seamless Tangible Interactions on Portable Displays*. In **ACM TEI 2016 Studio Workshop (as organizer)**, Eindhoven, The Netherlands.
6. Yung-Ta Lin, Jui-Chun Hsiao, Yi-Chi Liao, **Rong-Hao Liang**, and Bing-Yu Chen. **2016**. *One-dimensional Proactive Sensing for Enlarging Gesture-interaction Space*. In **TAICHI '16 Poster**, Taipei, Taiwan. **[Best Poster Award]**
7. Shan-Yuan Teng, Jo-Hsi Tang, Yi-Chi Liao, **Rong-Hao Liang**, and Bing-Yu Chen. **2016**. *Playing Air Guitar by Electrical Muscle Stimulation*. In **TAICHI '16 Poster**, Taipei, Taiwan, 2016.
8. Long-Fei Lin, Shan-Yuan Teng, **Rong-Hao Liang**, Bing-Yu Chen. 2016. *Stylus Assistant: Designing Dynamic Constraints for Facilitating Stylus Inputs on Portable Displays*. In **ACM SIGGRAPH Asia 2016 Emerging Technologies Demo**, Macao.
9. **Rong-Hao Liang**, Han-Chih Kuo, Bing-Yu Chen. **2015**. *GaussStarter: Prototyping Analog Hall-Sensor Grids with Breadboards*. In **ACM UIST 2015 Demo**, Charlotte, NC, USA.
10. Yi-Chi Liao, Shun-Yao Yang, **Rong-Hao Liang**, Liwei Chan, Bing-Yu Chen. **2015**. *ThirdHand: Wearing a Robotic Arm to Experience Rich Force Feedback*. In **ACM SIGGRAPH Asia 2015 Emerging Technologies Demo**, Kobe, Japan.
11. Yi-Ling Chen, Wei-Tse Lee, Liwei Chan, **Rong-Hao Liang**, Bing-Yu Chen. **2015**. *Direct View Manipulation for Drone Photography*. In **ACM SIGGRAPH Asia 2015 Poster**, Kobe, Japan.
12. Chin-Yu Chien, Cheng-Yuan Li, Liwei Chan, Yi-Chi Liao, **Rong-Hao Liang**, Hao-Hua Chu, Bing-Yu Chen. **2015**. *fStrip: A Malleable Shape-Retaining Wearable Strip for Interface On-Demand*. In **ACM Ubicomp 2015 Poster**, Osaka, Japan

13. Liwei Chan, Chi-Hao Hsieh, Yi-Ling Chen, Rong-Hao Liang, and Bing-Yu Chen. **2015**. *HandSight: Enabling Whole-Hand and Context-Aware Interactions Through a Fisheye Ring*. In **TAICHI '16 Poster**, Taipei, Taiwan.
14. **Rong-Hao Liang**, Chao Shen, Yu-Chien Chan, Guan-Ting Chou, Liwei Chan, De-Nian Yang, Mike Y. Chen, Bing-Yu Chen. **2015**. *WonderLens: Optical Lenses and Mirrors for Tangible Interactions on Printed Paper*. In **ACM CHI 2015 Interactivity Demo**, Seoul, Korea.
15. Hung-Yu Tseng, **Rong-Hao Liang**, Liwei Chan, Bing-Yu Chen. **2015**. *Utilizing Point-Light Movement as Peripheral Visual Guidance for Scooter Navigation*. In **ACM Augmented Human 2015 Poster**, Singapore.
16. Chi-Chiang Huang, **Rong-Hao Liang**, Liwei Chan, Bing-Yu Chen. **2014**. *Dart-It: Interacting with a Remote Display by Throwing Your Finger Touch*. In **ACM SIGGRAPH 2014 Emerging Technologies Demo and Poster**, Vancouver, BC, Canada.
17. Chi-Chiang Huang, **Rong-Hao Liang**, Liwei Chan, and Bing-Yu Chen. **2014**. *FingerShot: Perspective-Based Remote Direct-Pointing Using One RGBD Camera*. In **CGW'14**, Taipei, Taiwan, 2014.
18. **Rong-Hao Liang**, Liwei Chan, Hung-Yu Tseng, Han-Chih Kuo, Da-Yuan Huang, De-Nian Yang, Bing-Yu Chen. **2014**. *GaussBricks: Magnetic Building Blocks for Constructive Tangible Interactions on Portable Displays*. In **ACM CHI 2014 Demo & Video Showcase**, Toronto, ON, Canada.
19. Liwei Chan, Chien-Ting Weng, **Rong-Hao Liang**, and Bing-Yu Chen. **2014**. *AnyButton: Unpowered, Modeless and Highly Available Mobile Input Using Unmodified Clothing Buttons*. In **ACM Augmented Human 2014 Poster**, Kobe, Japan.
20. **Rong-Hao Liang**. **2013**. *Augmenting the Input Space of Portable Displays Using Add-On Hall-Sensor Grid*. In **ACM UIST 2013 Doctoral Symposium**, St Andrews, United Kingdom.
21. **Rong-Hao Liang**, Kai-Yin Cheng, Liwei Chan, Chuan-Xhyuan Peng, Mike Y. Chen, Rung-Huei Liang, De-Nian Yang, Bing-Yu Chen. **2013**. *GaussBits: Magnetic Tangible Bits for Portable and Occlusion-Free Near-Surface Interactions*. In **ACM CHI 2013 Interactivity Demo & Video Showcase**, Paris, France.
22. **Rong-Hao Liang**, Kai-Yin Cheng, Liwei Chan, Chuan-Xhyuan Peng, Mike Y. Chen, Rung-Huei Liang, De-Nian Yang, Bing-Yu Chen. **2013**. *Tracking Magnetics Above Portable Displays*. In **ACM SIGGRAPH 2013 Poster**, CA, USA.
23. **Rong-Hao Liang**, Chao-Huai Su, Chien-Ting Weng, Kai-Yin Cheng, Bing-Yu Chen, De-Nian Yang. **2012**. *GaussBrush: Drawing with Magnetic Stylus*. In **ACM SIGGRAPH Asia 2012 Emerging Technologies Demo**, Singapore. **[SIGGRAPH Asia 2012 Emerging Technologies Prize]**
24. **Rong-Hao Liang**, Kai-Yin Cheng, Bing-Yu Chen, De-Nian Yang. **2012**. *GaussSketch: Add-On Magnetic Sensing for Natural Sketching on Smartphones*. In **ACM SIGGRAPH 2012 Poster**, CA, USA.
25. **Rong-Hao Liang**, Shu-Yang Lin, Chao-Huai Su, Kai-Yin Cheng, Bing-Yu Chen, De-Nian Yang. **2011**. *SonarWatch: Appropriating the Forearm as a Slider Bar*. In **ACM SIGGRAPH Asia 2011 Emerging**

Technologies Demo, Hong Kong, China.

26. Kai-Yin Cheng, **Rong-Hao Liang**, Hung-Jung Lin, Bing-Yu Chen, Rung-Huei Liang, Ming-Yang Yu, Hao-Hua Chu, Yu-Ming Chu, Sy-Yen Kuo. **2009**. *MemoIcon: Using Everyday Objects as Physical Icons*. In **ACM SIGGRAPH Asia 2009 Emerging Technologies Demo**, Yokohama, Japan.
27. Chih-Ying Yang, Rung-Huei Liang, Wen-Jong Wu, Mang-Yang Lee, Kuo-Chun Tseng, **Rong-Hao Liang**, Hung-Jung Lin, Yi-Chu Lin, Yen-Hao Chen, Cheng-Dar Chiang, Bing-Yu Chen, and Kai-Yin Cheng. **2009**. *Memory Bricolage Table for the Elderly*. In **DeSForm '09 Demo**, Taipei, Taiwan.

Teaching

- *Interactive Intelligent Products*, Responsible Lecturer ('20, '19, '18), TU Eindhoven
- *Creative Electronics*, Lecturer ('20), Responsible Lecturer ('19, '18, '17), TU Eindhoven (with Peter Peters, Jan Rouvroye, Hank Apeldoorn, Geert van den Boomen, Pierre Cluitman)
- *Crafting Everyday Soft Things*, Squad Coach ('20, '19), TU Eindhoven (with Kristina Andersen, Annika Hupfeld, Loe Feijs, Stephan Wensveen)
- *Creative Programming*, Lecturer ('20, '19, '18), TU Eindhoven (with Jun Hu, Loe Feijs, Erik van der Spek, Peter Peters)
- *Sensors for Physiology*, Responsible Lecturer ('19), Lecturer ('18), TU Eindhoven (with Loe Feijs, Steven Vos)
- *Embodying Intelligent Behavior in Social Contexts*, Lecturer ('20, '19, '18, '17), TU Eindhoven (with Emilia Barakova, Jun Hu)
- *Connecting Realities*, Squad Leader ('18), TU Eindhoven (with Jun Hu, Caroline Hummels, Matthias Rauterburg, Pierre Levy)
- *Designing Intelligence in Interaction*, Lecturer ('18), TU Eindhoven (with Jun Hu, Loe Feijs, Matthias Rauterburg, Mathias Funk, Erik van der Spek)
- *Human-Computer Interaction*, Lecturer ('16), National Taiwan University (with Bing-Yu Chen)

Awards

1. **ACM DIS 2020 Best Paper Honorable Mention**, *FabriClick: Interweaving Pushbuttons into Fabrics Using 3D Printing and Digital Embroidery*. 2020.
2. **ACM UIST 2016 Best Talk Award**, *CircuitStack: Supporting Rapid Prototyping and Evolution of Electronic Circuits*. 2016.
3. **Excellent Ph.D. These Award**, **Institute of Information & Computing Machinery, Taiwan**. 2015.
4. **First Prize (\$85,000 Cash Prize)**, **4th MOST FITI Entrepreneur Competition, Taiwan**. *GaussToys*. 2014.

5. **First Prize (\$65,000 Cash Prize), 8th Acer Long-Term Entrepreneur Competition, Taiwan.**
GaussToys. 2014.
6. **ACM CHI 2014 Best Paper Honorable Mention, GaussBricks: Magnetic Building Blocks for Constructive Tangible Interactions on Portable Displays. 2014**
7. **ACM CHI 2014 People's Choice Best Talk Award, GaussBricks: Magnetic Building Blocks for Constructive Tangible Interactions on Portable Displays. 2014**
8. **ACM CHI 2013 Best Paper Award, NailDisplay: Bringing Always-Available Visual Display To Fingertips. 2013.**
9. **ACM SIGGRAPH Asia 2012 Emerging Technologies Prize, GaussBrush: Drawing with Magnetic Stylus. 2012.**
10. **Second Prize (\$32,000 Cash Prize), 7th Long-Term Entrepreneur Competition, Taiwan.**
ArmTech. 2012.

Patents (US)

1. US2015/0279096 A1. "Geometric Structure Analyzing Method, Geometric Structure Analyzing System, and Computer Program Product"
2. US2014/0207407 A1. "Near-Surface Object Sensing Device and Sensing Method"
3. US2013/0285940 A1. "Touch Type Control Equipment and Method Thereof"
4. US Patent Pending. "Identification System and Method for Shielded Magnetic Unit"
5. US Patent Pending. "Full-Body Gesture Recognition Device and Sending Method "
6. US Patent Pending. "Interactive Building Blocks Based on RFID"
7. US Patent Pending. "Batteryless and Wireless Modular Touch Sensor Pads Based on RFID"

Professional Services (International)

- ACM EICS 2021 Papers Chair
- ACM CHI 2021, 2020 Papers Program Committee Member
- ACM DIS 2020 Demos Chair
- ACM UIST 2020, 2017 Papers Program Committee Member
- ACM MobileHCI 2019 Posters Chair, Session Chair
- ACM TEI 2019, 2018 Papers Program Committee Member
- IET Cyber-Physical System Journal Guest Editor (2019)
- ACM CHI 2018 Session Chair

- ACM TEI 2017 Work-In-Progress Program Committee Member
- DeSForM 2017 Papers Chair, Session Chair
- ACM UIST 2016 Publicity Chair
- ACM SIGGRAPH Asia 2016 Emerging Technologies Program Committee Member
- Reviewer (> 3x): ACM CHI Papers, ACM UIST Papers, ACM TEI Papers, ACM DIS Papers, ACM IMWUT Papers, ACM SIGGRAPH Asia Technical Papers and Emerging Technologies.