Curriculum Vitae
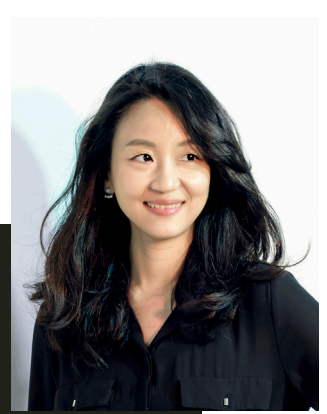
Yu-Chun Huang
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INFORMATION	1980.10.20	Born in Taipei, Taiwan
EDUCATION	2006-2012	[PhD in Architecture] Department of Engineering (Architecture) National Chiao Tung University, Taiwan
	2009-2010	[Doctoral Research] Department of Architecture University of California, Berkeley
	2004-2006	[MS in Architecture] Graduate Institute of Architecture National Chiao Tung University, Taiwan
LANGUAGE PROFICIENCY		English Chinese Mandarin Taiwanese
EMPLOYMENT	2024-Present	**Lecturer**, Department of Computer Science, Dartmouth College, Hanover, USA
	2022-Fall	**Adjunct Faculty**, Department of Mechanical & Manufacturing Engineering Technology, Vermont State University (Randolph), USA
	2013-2021	**Tenure-track Assistant Professor**, Graduate Institute of Design Science (co-appointed of Department of Media Design and Department of Industrial Design), Tatung University, Taipei, Taiwan.
	2017	**Visiting Assistant Professor**, College of Fine Arts and Design, Wenzhou University, China.
	2016	**Visiting Assistant Professor**, School of Industrial Design, Shangdong University of Art & Design, China.
	2014	**Visiting Assistant Professor**, "*Neuron Art Creation: Bionics 3D design*", School of Medicine, Johns Hopkins University, Baltimore, USA.
	2011-2012	**Lecturer**, Department of Industrial Design, Chung Hua University, Hsinchu, Taiwan.
	2010-Spring	**Guest Critic**, Department of Architecture, University of California, Berkeley, USA.
PROFESSIONAL SKILLS	Design software	3DsMax, Unity, Rhino, Grasshopper, AutoCAD, Sketchup, Photoshop, Illustrator, InDesign, Premiere.
	Special skills	Tangible-user interface (TUI), human-computer interaction design (HCI), virtual reality (VR), algorithm-aided design (AAD), computer-aided design/ computer-aided manufacturing (CAD/CAM), architecture design, graphic design, web design and 3D animation.
	Other skills	Sketch, Chinese calligraphy, water painting and photography.
PROGRAMMING LANGUAGES		Arduino, Processing, Lua.
DEGREE THESIS	PhD thesis	The new inter-relationship system of smart space between functions and elements: a personalized smart living and dinning space. Video
	MS thesis	A Brain-Computer Interface approach to smart space. Video

RESEARCH & GRANTS	2024-2025	Principal Investigator, "Augmented Reality Interior Design / ARID," 2024-2025, [research project] [iF Desgin Award2025]
	2018-2019	Principal Investigator, "Brain-Computer Interface (BCI) applied Virtual Reality (VR) online shopping system (II)", 2018-2019, Ministry of Science and Technology (MOST), 107-2410-H-036-005 [research project] $20600
	2017-2019	Co-principal Investigator, "A Contrast Emotions Design Model of Synchronic and Diachronic on Product Use (II), 2017-2019, Ministry of Science and Technology (MOST), 106-2221-E-036-010-MY2 [research project] $45750
	2017-2018	Principal Investigator, "Brain-Computer Interface (BCI) applied Virtual Reality (VR) online shopping system (I)", 2017-2018, Ministry of Science and Technology (MOST), 106-2410-H-036-011 [research project] $16140
	2016-2017	Principal Investigator, "Brain-Computer Interface (BCI) approach to CAD/CAM system (III)", 2016-2017, Ministry of Science and Technology (MOST), 105-2410-H-036 -006 [research project] $18000
	2015-2016	Principal Investigator, "Brain-Computer Interface (BCI) approach to CAD/CAM system (II)", 2015-2016, Ministry of Science and Technology (MOST), 104-2410-H-036 -004 [research project] $17263
	2014-2015	Principal Investigator, "Brain-Computer Interface (BCI) approach to CAD/CAM system (I)", 2014-2015, Ministry of Science and Technology (MOST), 103-2410-H-036-009 [research project] $15300
	2014-2016	Co-Principal Investigator, "Research of applying oxymoron in product use", 2014-2016, Ministry of Science and Technology (MOST), 103-2221-E-036-021-MY2 [research project] $17000
	2014-2015	Principal Investigator, "Smart house: Persuasive technology embedded emotional bionic furniture", 2014-2015, Tatung University, B103-DD1-027 [research project] $3500
	2013-2014	Principal Investigator, "Smart dinning room, an emotional communication interface applied smart space", 2014-2015, Tatung University, B101-DD03-078 [research project] $5200
PROFESSIONAL EMPLOYMENTS	2025	Reviewer, Computer-Aided Architectural Design (CAAD) Futures 2025.
	2024-Fall	Teaching course "Digital Tangible User Interfaces", Department of Computer Science, Dartmouth College (final outcome: SoundNet/paper, BlossomTruth/paper, Obapa/paper, RC Car For The Visually Disabled/ paper).
	2024-Spring	Teaching course "Digital Tangible User Interfaces", Department of Computer Science, Dartmouth College (final outcome: interactive Yoga/paper, focus flower/paper, vocal vibration art/paper).
	2022-Fall	Teaching course "Product Design and Production", Vermont State University.
	2014	Committee member, CID 2014 Annual Design Conference, Chinese Institute of Design, Taipei, Taiwan.
	2014	Web designer, CID 2014 Annual Design Conference, Chinese Institute of Design, Taipei, Taiwan.
	2009	Member, Hospital project, AUTODESK IDEA STUDIO, USA.
	2006-2007	Program manager, International conference of digital applications in cultural heritage (DACH 2007), National Cultural and Heritage Center, Taiwan. (http://www.arch.nctu.edu.tw/dach2007/)
	2006-2007	Manager, 2006 and 2007 FEIDAD Award, the Far Eastern Memorial Foundation of the Far Eastern Group, Taiwan.
	2007-2008	Member, NEXT GENE 20: Grand Land Architecture International Project, Genuine Development Asset Management Co. Ltd., Taiwan.
	2007	Chief designer, Historical building renewal, Foundation for Scholarly Exchange, Taiwan.
	2007	Designer, The Space of Art Exhibition Design in National Chang Kai Shek Cultural Center, Taiwan.

2006-2007	Chief designer, "Intelligent Space of Tomorrow: Time Home Pub", Architecture of Tomorrow Exhibition, Taipei Fine Arts Museum, Taiwan.	
2006	Member, Recording of Li Mei-shu's productions, The Li Mei-shu Memorial Gallery, Taiwan. (http://www.arch.nctu.edu.tw/LiMeiShu/)	
2005-2006	Member, Analysis of digital Media and historical architecture and city: The second stage, National Cultural and Heritage Center, Taiwan.	
2006	Web Designer, 2006 FEIDAD Award, the Far Eastern Memorial Foundation of the Far Eastern Group, Taiwan.(http://feidad.org/2006/html/1.htm)	

AWARDS & HONORS

2025	**iF DESIGN AWARD 2025**, "Augmented Reality Interior Design", Berlin, Germany (iF Desgin/ Video)
2017	Jiang, C.-Y., and Huang, Y.-C. (advisor) **iF DESIGN AWARD 2017**, "Smoke gets in your eye", Germany.
2016	Lee, C.-Y. and Huang, Y.- C. (advisor) **Merit Award of Corning Future Innovator 2016**, "Carbon monoxide ceramic filter system", Taiwan.
2016	**The Best Exhibition Design**, 2016 Vision Get Wild Award, Kaoshung, Taiwan.
2013	**Reddot Design Award**, "Dandelion Mirror [Interaction Design, Data Visualization]" Communication Design 2013, Germany.
2013	**iF Design Award**, "Dandelion Mirror" [digital media], the Winner of iF Communication Design Award, Hannover, Germany.
2012	**First Prize,** NCTU Architecture Research Award, Hsinchu, Taiwan.
2010	**Reported on NBC Bay Area News**, Heartbeat Jenga, 2009 Tangible User Interface Exhibition in School of Information, University of California, Berkeley, USA. Video
2008	**Award for Outstanding Teaching Assistant**, Remarkable contribution in the 2008 Teaching Assistant Evaluation, National Chiao Tung University, Taiwan.
2008	**Scholarship of Pre-PhD Teaching Assistant**, 1st Semester of 2008, National Chiao Tung University, Taiwan.
2008	**Scholarship of Pre-PhD Teaching Assistant**, 2nd Semester of 2007, National Chiao Tung University, Taiwan.
2006	**Top 5**, 2006 Creative Application Design of RFID Competition, Digital Frame: LiveFrame , Chinese Culture University Incubator, Taiwan.
2005	**First place**, 1st Semester of 2005, Graduate Institute of Architecture, National Chiao Tung University, Taiwan.

RESEARCH & PUBLICATIONS

Publication (Journal)

2020	Huang, Y.-C., Liu, S.-Y. (2020). Virtual Reality Online Shopping (VROS) Platform. HCII 2020. Lecture Notes in Computer Science, vol 12204. Springer, Cham. https://doi.org/10.1007/978-3-030-50341-3_27. (EI) pdf, Video
2018	Huang, S.C. and Huang, Y.-C. (2018) The Ghost in the Dandelion. Highlights from the IEEE VIS 2016 and 2017 Arts Program (VISAP'16 and '17). Posted Online September 18, 2018. https://doi.org/10.1162/leon_a_01701
2017	Huang, Y.-C. and Chen, K.-L. (2017). Brain-Computer Interfaces (BCI) based 3D Computer-Aided Design (CAD): to improve the efficiency of 3D modeling for new users. Part II, LNAI 10285, pp. 333–344, 2017. DOI: 10.1007/978-3-319-58625-0_24 MOST 105-2410-H-036-006. (EI) pdf, Video
2015	Huang, Y.-C. and Luk, C.-H. (2015). Heartbeat Jenga: A Biofeedback Board Game to Improve Coordination and Emotional Control. HCII 2015 international Conference: Design, User Experience, and Usability: Interactive Experience Design, DUXU 2015, Part III, LNCS 9188, pp. 1–8, 2015. (EI) pdf
2014	Huang, Y.-C. (2014). A Personalized smart living room: the new inter-relationship between Smart Space based on architecture view. In the Proceedings of HCI International 2014 (HCII2014), Heraklion, Crete, Greece, June 22-27. Lecture Notes in Computer Science, Volume 8530, 2014. Pp 37-47. (EI) pdf, Video

2014	Huang, Y.-C. and Han, S. R. (2014). An Immersive Virtual Reality Museum via Second Life. HCI International 2014 - Posters' Extended Abstracts, Communications in Computer and Information Science Volume 434, 2014. Pp 579-584. (EI) pdf, Video
2013	Huang, Y.-C., Wu, K.-Y. and Liu, Y.-T. (2013). Future home design: an emotional communication channel approach to Smart Space. Personal and Ubiquitous Computing, Volume 17, Issue 6. Pp. 1281-1293. (SCI) pdf, Video
2011	Huang, Y.-C. (2011). How human-computer interface redefines original lifestyle in architecture? Trans Tech Publications, Switzerland doi:10.4028/www.scientific.net/AMR.250-253.1088. In the Journal of *Advance Materials Research*. Vols. 250-253. Pp. 1088-1097. (EI) pdf

(Conference paper)

2025	Huang, Y.-C., and Ni, Z. (Accepted). ARID: Augmented Reality Interior Design HCI International 2025 - Posters. HCII 2025. Communications in Computer and Information Science, Springer.
2019	Huang, Y.-C., Hu, S.-Y., Wang, S.-T., Huang, S. C.-C. (2019). Exploration of Virtual Reality-Based Online Shopping Platform. HCI International 2019 - Posters. HCII 2019. Communications in Computer and Information Science, vol 1034. Springer, Cham. https://doi.org/10.1007/978-3-030-23525-3_11. pdf
2016	Wu, M.-Y., Chen, K.-L., and Huang, Y.-C. (2016). A SMART BRACELET: An alternative interfaces between performer and audience. Proceedings of the 21st International Conference of the Association for Computer-Aided Architectural Design Research in Asia CAADRIA 2016, April 2016, Pp311–319. pdf
2015	Huang, Y.-C., Chen, K.-L., Wu, M.-Y., Tu, Y.-W., Huang, S. C.-C. (2015). Brain-Computer Interface Approach to Computer-Aided Design: Rotate and zoom in/out in 3Ds Max via imagination. International Conferences Interfaces and Human Computer Interaction 2015, Game and Entertainment Technologies 2015 and Computer Graphics, Visualization, Computer Vision and Image Processing 2015, Spain. pdf, Video
2008	Huang, Y.-C., Wu, K.-Y., Liu, Y.-T. (2009). A Time Home Pub: an alternative communication of Human-Computer Interface approach to smart space. In the Proceedings of the 14th International Conference on Computer Aided Architectural Design Research in Asia (CAADRIA 2009). Yunlin, Taiwan, Pp. 577-586. pdf, Video
2007	Huang, Y.-C. (2007). Three Building Cases for Taiwanese Style. Asian Architectural Youth Symposium 2007.
2006	Huang, Y.-C. (2006). A Space Make You Lively: A Brain-Computer Interface Approach to Smart Space. In the Proceedings of the 11th International Conference on Computer Aided Architectural Design Research in Asia (CAADRIA 2006). Kumamoto, Japan. Pp. 303-312. pdf, Video
2006	LiveFrame of 2006 Creative Application Design of RFID Competition, Next Magazine, no.115. Pp. 26-26, 2006, Taiwan.

Co-editor

2007	Liu, Y.-T., Huang, Y.-C. (2007). Distinguishing Digital Architecture: 6th Far Eastern International Digital Architectural Design Award, Birkhäuser. (& Chinese Version)
2006	Liu, Y.-T., Wu, P.-L., Chung, Y.-C., Huang, Y.-C. (2006). Demonstrating Digital Architecture: 5th Far Eastern International Digital Design Award, Birkhäuser. (& Chinese Version)
2006	Liu, Y.-T., Chung, Y.-C., Huang, Y.-C. (2006). Glocalization: New Taiwan Architecture 2000-2005, Livonia, Michigan: First Page.(English & Chinese Version)
2007	Catalogue of Architecture of Tomorrow Exhibition, Graduate Institute of Architecture, Taipei Fine Arts Museum, 2007.

EXHIBITION

| 2013 | Exhibitor, Red Dot Award, Communication Design 2013, Berlin, Germany. |
| 2010 | Exhibitor, Virtual Smithsonian- Art Gallery, University of California, Berkeley, USA. |

	2009	Exhibitor, Heartbeat Jenga, Tangible User Interfaces Exhibition, University of California, Berkeley, USA. Video
	2007	Exhibitor, Architecture of Tomorrow exhibition, Taipei Fine Arts Museum, Taiwan.
	2005	Participant, 1st Shenzhen Biennial of Urbanism and Architecture, Shenzhen, China.
	2005	Participant, MIT media in Asia Reality 2005 workshop, Eat-Eat-Eat, Advisor: Jackie Lee & Francis Lam, Taiwan. (http://www.nightmarket.org/ar2005/eat.htm)
	2005	Participant, Ocean Taiwan/Water Taipei, 2004 Master's Design Workshop, Advisor: Yaako & Henk, Studio Sputnik, Taiwan.
	2005	Exhibitor, 5th Graduated Design Exhibition of Department of Environmental Design, Taipei County Government, Taiwan.
	2004	Exhibitor, 4th Graduated Design Exhibition of Department of Environmental Design, Shihlin Paper Corporation, Taiwan.
	2003	Exhibitor, 3th Graduated Design Exhibition of Department of Environmental Design, Taipei City Government, Taiwan.
CONFERENCE & WORKSHOPS	2020	Presentation, HCI International Conference 2020 (HCII2020), online, July 19-24.
	2017	Presentation, HCI International Conference 2017 (HCII2017), Vancouver, USA, July 9-14.
	2015	Presentation, HCI International Conference 2015 (HCII2015), Los Angles, USA, August 2-7.
	2014	Presentation, HCI International Conference 2014 (HCII2014), Heraklion, Crete, Greece, June 22-27.
	2009	Presentation, CAARIA 2009: Between Man and Machine, the Association for Computer Aided Architectural Design in Asia, Yunlin, Taiwan.
	2007	Presentation, Asian Architectural Youth Symposium 2007, Kobe, Japan
	2006	Presentation, CAARIA 2006: Rhythm and Harmony in Digital Space, the Association for Computer Aided Architectural Design in Asia, Kumamoto, Japan.
	2005	Participant, MIT media in Asia Reality 2005 workshop, Advisor: Jackie Lee & Francis Lam, Taiwan.
	2004	Participant, Ocean Taiwan/Water Taipei, 2004 Master's Design Workshop, Advisor: Yaako & Henk, Studio Sputnik, Taiwan.
ACTIVITIES & EXPERIENCE	2010	**Guest critic**, Fundamental Design, Department of Architecture, University of California, Berkeley, USA.
	2007	**Overseas exchange**, 2007 Osaka Invitational Program for Short-Term Oversea Trainees in Architecture and Art (Ando Program), Osaka Foundation of International Exchange (OFIX), 16th Oct.-14 Nov., Japan.
	2007	**Trainee**, Practice architecture design, Obayashi Corporation, Osaka, Japan.
	2007	**Designer**, Interior design of dancing room, Hsinchu, Taiwan.
	2008	**Teaching Assistant**, 1st Semester of 2007, "Fundamentals of Design (V)", National Chiao Tung University, Taiwan.
	2008	**Teaching Assistant**, 2nd Semester of 2007, "Fundamentals of Design (IV)", National Chiao Tung University, Taiwan.
	2007	**Teaching Assistant**, 1st Semester of 2007, "Fundamentals of Design (III)", National Chiao Tung University, Taiwan.
	2007	**Teaching Assistant**, 2nd Semester of 2006, "Fundamentals of Design (II)", National Chiao Tung University, Taiwan.
	2006	**Teaching Assistant**, 1st Semester of 2006, "Introduction of Digital Media: Image, 3D, Animation, Video", National Chiao Tung University, Taiwan.

2005	**Teaching Assistant**, 1st Semester of 2005, "Lecture of Humanities, Social Sciences ,and Arts", National Chiao Tung University, Taiwan.
2005	**Coordinator**, 1st Tadao Ando Tour, Japan.
2004	**Coordinator**, 2004 FEIDAD Award Ceremony Reception, Taiwan.
2008	**Web designer**, Institute of TESOL, NCTU, Taiwan.
2007	**Brochure designer**, Institute of TESOL, NCTU, Taiwan.
2007	**Poster designer**, Institute of TESOL, NCTU, Taiwan.
2006	**Brochure designer**, Institute of Communication Studies, NCTU, Taiwan.
2006	**Web designer**, WOW (Welcome to Online Writing), NCTU, Taiwan. (http://ltrc.nctu.edu.tw/home/wow/)
2005	**Web designer**, LTRC (Language Teaching and Research Center, NCTU, Taiwan.
1991-1992	**Manager**, PCCU Textile Engineering Basketball Team, Taiwan.