## Xiang 'Anthony' Chen

6730A Boelter Hall, UCLA Los Angeles, CA 90095 USA xac@ucla.edu https://hci.prof

## **Current Position**

2018-Now Assistant Department of Electrical & Computer Engineering

Professor UCLA

#### Education

2012-2017 Ph.D. Carnegie Mellon University

School of Computer Science

Advisors: Scott Hudson and Stelian Coros Committee: Jodi Forlizzi and Tovi Grossman

2010-2012 M.Sc. University of Calgary

Department of Computer Science

Advisors: Saul Greenberg and Richard Levy Committee: Barry Wylant and Larry Katz

2010-2010 Universidad Politécnica de Madrid

Exchange student in Telecommunication Engineering, E.T.S.I. Telecomunicación

2006-2010 B.Eng. Zhejiang University

Department of Computer Science Chu Kochen Honors College

2003-2006 Affiliated High School of South China Normal University

Innovation Class student in Science

### **Awards**

2023 CHI Best Paper Honorable Mention Award

2022 Intel Rising Star Award

2022 UIST Best Paper Award

2022 Google Research Scholar Award

2021	ONR Young Investigator Award
2021	NSF CAREER Award 🖸
2020	Hellman Fellowship
2020	CHI Best Paper Honorable Mention Award
2019	NSF CISE Research Initiation Initiative (CRII) Award
2018	CHI Best Paper Honorable Mention Award
2016	Adobe Research PhD Fellowship
2015	Qualcomm Innovation Fellowship Finalist
2014	UIST Best Paper Award 🖸
2014	CHI Best Paper Award
2014	CHI Best Talk Award
2013	Qualcomm Innovation Fellowship Finalist
2012	University of Calgary Department Research Award
2010	Academic Project Scholarships in Madrid-Spain for Chinese Technical Students
2009	Zhejiang University Academic Scholarship
2007-2008	University of Hong Kong Crimson Summer Exchange Co-Fellowship
Awards Wor	n by Students
2023	Xingyu Liu - Amazon PhD Fellowship
2023	Hongyan Gu - UCLA ECE Dissertation Year Fellowship
2022	Xingyu Liu - UCLA ECE Distinguished Master's Thesis Research Award
2022	Xingyu Liu - UCLA School of Engineering ED Rice Outstanding Master Student Award

# **Professional Experiences**

2022-2022	Visiting	Department of Computer Science
	Professor	University of Tokyo
		Collaborated with Prof. Takeo Igarashi's research group
2021-2023	Visiting	Salesforce Research
	Professor	Collaborated on multiple HCI + NLP projects
2018-2018	Research	Tableau Research, Palo Alto
	Scientist	Enabling people to interact with data on mobile devices

2015-2015	Research	Google Research, Mountain View
	Intern	Mobile Interactive Computing Group with Yang Li
		Developed a user-defined cross-device interaction framework
2014-2014	Research	Microsoft Research, Redmond
	Intern	Natural Interaction Research Group with Bill Buxton and Ken Hinckley
		Developed a multi-wearable interactive system
2013-2013	Research	Autodesk Research, Toronto
	Intern	User Interface Research Group with Tovi Grossman, Daniel Wigdor, and George Fitz-
		maurice
		Developed interaction techniques with smart watches
2012-2012	Research	Microsoft Research, Redmond
	Intern	Natural Interaction Research Group with Ken Hinckley and Hrvoje Benko
		Developed motion and context sensing techniques for pen computing
2009-2010	Research	Microsoft Research Asia, Beijing
	Intern	Media Computing Group with Bin B. Zhu
		Developed novel CAPTCHA techniques and systems
2009-2009	Engineer	Alibaba Group, Hangzhou
	Intern	Quality Assurance Group
		Developed routines for testing data-centric web-based programs

# **Publications**

Conferences & Journals				
2023	UIST	Zihan Yan, Chunxu Yang, Qihao Liang, Pattie Maes, Xiang 'Anthony' Chen. XCreation: A Graph-based Crossmodal Generative Creativity Support Tool. To appear at UIST '23		
2023	ТОСНІ	Xiang 'Anthony' Chen, Chien-Sheng Wu, Lidiya Murakhovs'ka, Philippe Labn, Tong Niu, Wenhao Liu, Caiming Xiong. Marvista: A Human-AI Collaborative Reading Tool. ACM Trans. Comput. Hum. Interact., 2023	ď	
2023	LNCS	Hongyan Gu, Mohammad Haeri, Shuo Ni, Christopher Kazu Williams, Neda Zarrin-Khameh, Shino Magaki, Xiang 'Anthony' Chen. Detecting Mitoses with a Convolutional Neural Network for MIDOG 2022 Challenge. In: Sheng, B., Aubreville, M. (eds) Mitosis Domain Generalization and Diabetic Retinopathy Analysis. MIDOG DRAC 2022. Lecture Notes in Computer Science, vol 13597. Springer, Cham.	ď	
2023	MobileHCI	Zihan Yan, Yanhong Wu, Danli Luo, Chao Zhang, Qihang Jin, Wei Chen, Yingcai Wu, Xiang 'Anthony' Chen, Guanyun Wang, Haipeng Mi. NaCanva: Exploring and Enabling the Nature-Inspired Creativity for Children. To appear at MobileHCI '23.		
2023	GI	Yijun Zhou, JinHong Lu, Xiang 'Anthony' Chen, Chia-Ming Chang, Takeo Igarashi. RelRoll: A Relative Elicitation Mechanism for Scoring Annotation with A Case Study on Speech Emotion. To appear at Graphics Interface '23.	Ø	

2023	СНІ	Hongyan Gu, Chunxu Yang, Mohammad Haeri, Jing Wang, Shirley Tang, Wenzhong Yan, Shujin He, Christopher Kazu Williams, Shino Magaki, Xiang 'Anthony' Chen. Augmenting Pathologists with NaviPath: Design and Evaluation of a Human-AI Collaborative Navigation System. Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems, 2023.  **Best Paper Honorable Mention Award*	ď
2023	СНІ	Mina Huh, Saelyne Yang, Yi-Hao Peng, Xiang 'Anthony' Chen, Young-Ho Kim, Amy Pavel. AVscript: Accessible Video Editing with Audio-Visual Scripts. Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems, 2023.	ď
2023	СНІ	Xingyu "Bruce" Liu, Vladimir Kirilyuk, Xiuxiu Yuan, Alex Olwal, Peggy Chi, Xiang 'Anthony' Chen, Ruofei Du. Visual Captions: Augmenting Verbal Communication with On-the-fly Visuals. Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems, 2023.	ď
2023	СНІ	Philippe Laban, Chien-Sheng Wu, Lidiya Murakhovs'ka, Xiang 'Anthony' Chen, Caiming Xiong. Designing and Evaluating Interfaces that Highlight News Coverage Diversity Using Discord Questions. Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems, 2023.	ď
2023	СНІ	Noyan Evirgen, Xiang 'Anthony' Chen. GANravel: User-Driven Direction Disentanglement in Generative Adversarial Networks. Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems, 2023.	Ø
2023	ТОСНІ	Hongyan Gu, Yuan Liang, Yifan Xu, Christopher Kazu Williams, Shino Magaki, Negar Khanlou, Harry Vinters, Zesheng Chen, Shuo Ni, Chunxu Yang, Wenzhong Yan, Xinhai Robert Zhang, Yang Li, Mohammad Haeri, Xiang 'Anthony' Chen. Improving Workflow Integration with xPath: Design and Evaluation of a Human-AI Diagnosis System in Pathology. ACM Trans. Comput. Hum. Interact., April, 2023.	ď
2022	UIST	Xingyu "Bruce" Liu, Ruolin Wang, Dingzeyu Li, Xiang 'Anthony' Chen, Amy Pavel. CrossA11y: Identifying Video Accessibility Issues via Cross-modal Grounding. Proceedings of the UIST '22: The 35rd Annual ACM Symposium on User Interface Software and Technology, 2022.  **P Best Paper Award**	ď
2022	EMNLP	Philippe Laban, Chien-Sheng Wu, Lidiya Murakhovs'ka, Xiang 'Anthony' Chen, Caiming Xiong. Discord Questions: A Computational Approach To Diversity Analysis in News Coverage. Proceedings of the Findings of the Association for Computational Linguistics: EMNLP 2022	ď
2022	UIST	Noyan Evirgen, Xiang 'Anthony' Chen. GANzilla: User-Driven Direction Discovery in Generative Adversarial Networks. Proceedings of the UIST '22: The 35rd Annual ACM Symposium on User Interface Software and Technology, 2022	Ø
2022	IMWUT	Zihan Yan, Jiayi Zhou, Yufei Wu, Guanhong Liu, Danli, Luo, Zihong Zhou, Haipeng Mi, Lingyun Sun, Xiang 'Anthony' Chen, Ye Tao, Yang Zhang, Guanyun Wang. Shoes++: A Smart Detachable Sole for Social Foot-to-foot Interaction. Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies.	ď
2022	CHI	Zihan Yan, Yufei Wu, Yang Zhang, Xiang 'Anthony' Chen. EmoGlass: an End-to-End AI-Enabled Wearable Platform for Enhancing Self-Awareness of Emotional Health.	Ø

		tems, New Orleans, LA, USA, 29 April 2022, 2022.	
2022	СНІ	Jiahao Li, Alexis Samoylov, Jeeeun Kim, Xiang 'Anthony' Chen. Roman: Making Everyday Objects Robotically Manipulable with 3D-Printable Add-on Mechanisms. Proceedings of the CHI '22: CHI Conference on Human Factors in Computing Systems, New Orleans, LA, USA, 29 April 2022, 2022.	ď
2022	СНІ	Abul Al Arabi, Jiahao Li, Xiang 'Anthony' Chen, Jeeeun Kim. Mobiot: Augmenting Everyday Objects into Moving IoT Devices Using 3D Printed Attachments Generated by Demonstration. Proceedings of the CHI '22: CHI Conference on Human Factors in Computing Systems, New Orleans, LA, USA, 29 April 2022, 2022.	ď
2021	CSCW	Hongyan Gu, Jingbin Huang, Lauren Hung, Xiang 'Anthony' Chen. Lessons Learned from Designing an AI-Enabled Diagnosis Tool for Pathologists. Proc. ACM Hum. Comput. Interact., 2021.	ď
2021	TEI	Jeeeun Kim, Qingnan Zhou, Amanda Ghassaei, Xiang 'Anthony' Chen. OmniSoft: A Design Tool for Soft Objects by Example. Proceedings of the TEI '21: Fifteenth International Conference on Tangible, 2021.	ď
2021	IUI	Juan Carlo Rebanal, Jordan Combitsis, Yuqi Tang, Xiang 'Anthony' Chen. XAlgo: a Design Probe of Explaining Algorithms' Internal States via Question-Answering. Proceedings of the IUI '21: 26th International Conference on Intelligent User Interfaces, 2021.	ď
2021	IUI	Yuan Liang, Liang Qiu, Tiancheng Lu, Zhujun Fang, Dezhan Tu, Jiawei Yang, Yiting Shao, Kun Wang, Xiang 'Anthony' Chen, Lei He. OralViewer: 3D Demonstration of Dental Surgeries for Patient Education with Oral Cavity Reconstruction from a 2D Panoramic X-ray. Proceedings of the IUI '21: 26th International Conference on Intelligent User Interfaces, 2021	
2021	CHI	Ruolin Wang, Zixuan Chen, Mingrui Ray Zhang, Zhaoheng Li, Zhixiu Liu, Zihan Dang, Chun Yu, Xiang 'Anthony' Chen. Revamp: Enhancing Accessible Information Seeking Experience of Online Shopping for Blind or Low Vision Users. Proceedings of the CHI '21: CHI Conference on Human Factors in Computing Systems, 2021	ď
2021	СНІ	Xingyu Liu, Patrick Carrington, Xiang 'Anthony' Chen, Amy Pavel. What Makes Videos Accessible to Blind and Visually Impaired People? Proceedings of the CHI '21: CHI Conference on Human Factors in Computing Systems, 2021.	ď
2020	VRST	Yudai Tanaka, Arata Horie, Xiang 'Anthony' Chen. DualVib: Simulating Haptic Sensation of Dynamic Mass by Combining Pseudo-Force and Texture Feedback. Proceedings of the VRST '20: 26th ACM Symposium on Virtual Reality Software and Technology, 2020.	ď
2020	UIST	Ritam Jyoti Sarmah, Yunpeng Ding, Di Wang, Cheuk Yin Phipson Lee, Toby Jia-Jun Li, Xiang 'Anthony' Chen. Geno: A Developer Tool for Authoring Multimodal Interaction on Existing Web Applications. Proceedings of the UIST '20: The 33rd Annual ACM Symposium on User Interface Software and Technology, 2020.	ď
2020	UIST	Jiahao Li, Meilin Cui, Jeeeun Kim, Xiang 'Anthony' Chen. Romeo: A Design Tool for Embedding Transformable Parts in 3D Models to Robotically Augment Default	ď

Proceedings of the CHI '22: CHI Conference on Human Factors in Computing Sys-

		User Interface Software and Technology, 2020.	
2020	СНІ	Yuan Liang, Hsuan-Wei Fan, Zhujun Fang, Leiying Miao, Wen Li, Xuan Zhang, Weibin Sun, Kun Wang, Lei He, Xiang Anthony Chen. OralCam: Enabling Self-Examination and Awareness of Oral Health Using a Smartphone Camera. Proceedings of the CHI '20: CHI Conference on Human Factors in Computing Systems, 2020.  **Best Paper Honorable Mention Award*	ď
2020	СНІ	Yao Xie, Melody Chen, David Kao, Ge Gao, Xiang 'Anthony' Chen. CheXplain: Enabling Physicians to Explore and Understand Data-Driven, AI-Enabled Medical Imaging Analysis. Proceedings of the CHI '20: CHI Conference on Human Factors in Computing Systems, 2020.	Ø
2019	UIST	Robiot: A Design Tool for Actuating Everyday Objects with Automatically Generated 3D Printable Mechanisms. Jiahao Li, Jeeeun Kim, Xiang 'Anthony' Chen. Proceedings of the 32nd Annual ACM Symposium on User Interface Software and Technology, 2019.	ď
2019	SUI	Runchang Kang, Anhong Guo, Gierad Laput, Yang Li, Xiang 'Anthony' Chen. Minuet: Multimodal Interaction with an Internet of Things. Proceedings of the Symposium on Spatial User Interaction, 2019.	ď
2018	UIST	Da-Yuan Huang, Teddy Seyed, Linjun Li, Jun Gong, Zhihao Yao, Yuchen Jiao, Xiang 'Anthony' Chen, Xing-Dong Yang. Orecchio: Extending Body-Language through Actuated Static and Dynamic Auricular Postures. Proceedings of the 31st Annual ACM Symposium on User Interface Software and Technology, 2018.	ď
2018	CHI	Jun Gong, Zheer Xu, Qifan Guo, Teddy Seyed, Xiang 'Anthony' Chen, Xiaojun Bi, Xing-Dong Yang. Wris Text: One-handed Text Entry on Smartwatch using Wrist Gestures. Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems, 2018.  **Best Paper Honorable Mention Award*	ď
2018	CHI	Xiang 'Anthony' Chen, Ye Tao, Guanyun Wang, Runchang Kang, Tovi Grossman, Stelian Coros, Scott E. Hudson. Forte: User-Driven Generative Design. Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems, 2018.	ď
2018	CHI	Xiang 'Anthony' Chen, Stelian Coros, Scott E. Hudson. Medley: A Library of Embeddables to Explore Rich Material Properties for 3D Printed Objects. Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems, 2018.	ď
2018	СНІ	Byoungkwon An, Ye Tao, Jianzhe Gu, Tingyu Cheng, Xiang 'Anthony' Chen, Xiaoxiao Zhang, Wei Zhao, Youngwook Do, Shigeo Takahashi, Hsiang-Yun Wu, Teng Zhang, Lining Yao. Thermorph: Democratizing 4D Printing of Self-Folding Materials and Interfaces. Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems, 2018.	ď
2017	ТОСНІ	Xiang 'Anthony' Chen, Yang Li. Improv: An Input Framework for Improvising Cross-Device Interaction by Demonstration. ACM Trans. Comput. Hum. Interact., 2017	ď
2017	CHI	☑ ·	

Functionalities. Proceedings of the UIST '20: The 33rd Annual ACM Symposium on

		Mankoff, Jeffrey P. Bigham. Facade: Auto-generating Tactile Interfaces to Appliances. Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems, 2017.	
2016	UIST	Anhong Guo, Xiang 'Anthony' Chen, Haoran Qi, Samuel White, Suman Ghosh, Chieko Asakawa, Jeffrey P. Bigham. VizLens: A Robust and Interactive Screen Reader for Interfaces in the Real World. Proceedings of the 29th Annual Symposium on User Interface Software and Technology, 2016.	ď
2016	UIST	Xiang 'Anthony' Chen, Yang Li. Bootstrapping User-Defined Body Tapping Recognition with Offline-Learned Probabilistic Representation. Proceedings of the 29th Annual Symposium on User Interface Software and Technology, 2016.	
2016	UIST	Xiang 'Anthony' Chen, Jeeeun Kim, Jennifer Mankoff, Tovi Grossman, Stelian Coros, Scott E. Hudson. Reprise: A Design Tool for Specifying, Generating, and Customizing 3D Printable Adaptations on Everyday Objects. Proceedings of the 29th Annual Symposium on User Interface Software and Technology, 2016.	ď
2016	IUI	Gierad Laput, Xiang 'Anthony' Chen, Chris Harrison. SweepSense: Ad Hoc Configuration Sensing Using Reflected Swept-Frequency Ultrasonics. Proceedings of the 21st International Conference on Intelligent User Interfaces, 2016.	ď
2016	GI	Vikram Cannanure, Xiang 'Anthony' Chen, Jennifer Mankoff. Twist 'n' Knock: A One-handed Gesture for Smart Watches. Proceedings of the 42nd Graphics Interface Conference, 2016.	ď
2016	СНІ	Adrian A. de Freitas, Michael Nebeling, Xiang 'Anthony' Chen, Junrui Yang, Akshaye Shreenithi Kirupa Karthikeyan Ranithangam, Anind K. Dey. Snap-To-It: A User-Inspired Platform for Opportunistic Device Interactions. Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, 2016.	ď
2015	UIST	Gierad Laput, Xiang 'Anthony' Chen, Chris Harrison. 3D Printed Hair: Fused Deposition Modeling of Soft Strands, Fibers, and Bristles. Proceedings of the 28th Annual ACM Symposium on User Interface Software & Technology, 2015.	ď
2015	UIST	Xiang 'Anthony' Chen, Stelian Coros, Jennifer Mankoff, Scott E. Hudson. Encore: 3D Printed Augmentation of Everyday Objects with Printed-Over, Affixed and Interlocked Attachments. Proceedings of the 28th Annual ACM Symposium on User Interface Software & Technology, 2015.	区
2015	Mobile- HCI	Tovi Grossman, Xiang 'Anthony' Chen, George W. Fitzmaurice. Typing on Glasses: Adapting Text Entry to Smart Eyewear. Proceedings of the 17th International Conference on Human-Computer Interaction with Mobile Devices and Services, 2015.	ď
2014	UIST	Gierad Laput, Robert Xiao, Xiang 'Anthony' Chen, Scott E. Hudson, Chris Harrison. Skin buttons: cheap, small, low-powered and clickable fixed-icon laser projectors. Proceedings of the 27th Annual ACM Symposium on User Interface Software and Technology, 2014.	ď
2014	UIST	Ken Hinckley, Michel Pahud, Hrvoje Benko, Pourang Irani, François Guimbretière, Marcel Gavriliu, Xiang 'Anthony' Chen, Fabrice Matulic, William Buxton, Andrew	C

Anhong Guo, Jeeeun Kim, Xiang 'Anthony' Chen, Tom Yeh, Scott E. Hudson, Jennifer

nual ACM Symposium on User Interface Software and Technology, 2014. P Best Paper Award 2014 **UIST** Xiang 'Anthony' Chen, Julia Schwarz, Chris Harrison, Jennifer Mankoff, Scott E. Hudson. Air+touch: interweaving touch & in-air gestures. Proceedings of the 27th Annual ACM Symposium on User Interface Software and Technology, 2014. 2014 **UIST** Xiang 'Anthony' Chen, Tovi Grossman, George W. Fitzmaurice. Swipeboard: a text C entry technique for ultra-small interfaces that supports novice to expert transitions. Proceedings of the 27th Annual ACM Symposium on User Interface Software and Technology, 2014. 2014 Mobile-Xiang 'Anthony' Chen, Julia Schwarz, Chris Harrison, Jennifer Mankoff, Scott E. C **HCI** Hudson. Around-body interaction: sensing & interaction techniques for proprioception-enhanced input with mobile devices. Proceedings of the 16th international conference on Human-computer interaction with mobile devices & services, 2014. 2014 CHI Xiang 'Anthony' Chen, Tovi Grossman, Daniel J. Wigdor, George W. Fitzmaurice. C Duet: exploring joint interactions on a smart phone and a smart watch. Proceedings of the CHI Conference on Human Factors in Computing Systems, 2014. **P** Best Paper Award 2013 GI Ken Hinckley, Xiang 'Anthony' Chen, Hrvoje Benko. Motion and context sensing C techniques for pen computing. Proceedings of the Graphics Interface 2013, 2013. Visual 2013 Bin Pan, Yong Zhao, Xiaoming Guo, Xiang Chen, Wei Chen, Qunsheng Peng. Per-Computer ception-motivated visualization for 3D city scenes. The Visual Computer. 29.4 (2013): 277-286. C 2012 MobileHCI Xiang 'Anthony' Chen, Nicolai Marquardt, Anthony Tang, Sebastian Boring, Saul Greenberg. Extending a mobile device's interaction space through body-centric interaction. Proceedings of the Mobile HCI '12, 2012. 2012 Mobile-Sebastian Boring, David Ledo, Xiang 'Anthony' Chen, Nicolai Marquardt, Anthony C **HCI** Tang, Saul Greenberg. The fat thumb: using the thumb's contact size for single-handed mobile interaction. Proceedings of the Mobile HCI '12, 2012. 2012 AVI Xiang 'Anthony' Chen, Sebastian Boring, Sheelagh Carpendale, Anthony Tang, Saul Greenberg. Spalendar: visualizing a group's calendar events over a geographic space on a public display. Proceedings of the International Working Conference on Advanced Visual Interfaces, 2012. 2012 CAD/CG Bin Pan, Xiang Chen, Xiaoming Guo, Wei Chen, Qunsheng Peng. Interactive Expressive Illustration of 3D City Scene. Proc. CAD/Graphics 2011. Dissertations & These 2017 Ph.D. Making Fabrication Real: Fabrication for Real Usage, with Real Objects, by Real People. Doctoral dissertation, Carnegie Mellon University

Wilson. Sensing techniques for tablet+stylus interaction. Proceedings of the 27th An-

Body-Centric Interaction with a Screen-based Handheld Device

Master's thesis, University of Calgary

2012

M. Sc.

# Book Chapters

2021	

Yuan Liang, Lei He, Xiang 'Anthony' Chen. Human-Centered AI for Medical Imaging. In: Yang Li, Otmar Hilliges. (eds) Artificial Intelligence for Human Computer Interaction: A Modern Approach. Human–Computer Interaction Series. Springer, Cham.

## Magazine Articles

2019

2016

TEI

CACM

Jennifer Mankoff, Megan Hofmann, Xiang 'Anthony' Chen, Scott E. Hudson, Amy Hurst, Jeeeun Kim. Consumer-grade fabrication and its potential to revolutionize accessibility. Commun. ACM, 2019.

C

## Workshop, Demo, Work-in-Progress, Poster, and Consortium Papers

2023	CHI	Hyung-Kwon Ko, Kihoon Son, Hyoungwook Jin, Yoonseo Choi, Xiang 'Anthony' Chen. ChatGPT for Moderating Customer Inquiries and Responses to Alleviate Stress and Reduce Emotional Dissonance of Customer Service Representatives. CHI Gen-AI workshop 2023.
2023	CHI	Xinyue Gui, Koki Toda, Stela H. Seo, Felix Martin Eckert, Chia-Ming Chang, Xiang 'Anthony' Chen, Takeo Igarashi. A Field Study on Pedestrians' Thoughts toward a Car with Gazing Eyes. Proceedings of the Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems, 2023.
2022	MICCAI	Hongyan Gu, Mohammad Haeri, Shuo Ni, Christopher Kazu Williams, Neda Zarrin-Khameh, Shino Magaki, Xiang 'Anthony' Chen. Detecting Mitoses with a Convolutional Neural Network for MIDOG 2022 Challenge. MIDOG 2022 Workshop of MICCAI 2022.
2020	UIST	Eric Balagtas Perez, James King, Yugo H. Watanabe, Xiang 'Anthony' Chen. Counterweight: Diversifying News Consumption. Proceedings of the UIST '20 Adjunct: The 33rd Annual ACM Symposium on User Interface Software and Technology, 2020.
2019	IUI	Yao Xie, Xiang 'Anthony' Chen, Ge Gao. Outlining the Design Space of Explainable Intelligent Systems for Medical Diagnosis. Proceedings of the Joint Proceedings of the ACM IUI 2019 Workshops co-located with the 24th ACM Conference on Intelligent User Interfaces (ACM IUI 2019), 2019.
2019	IUI	Benjamin Wagstaff, Chiao Lu, Xiang 'Anthony' Chen. Automatic exam grading by a mobile camera: snap a picture to grade your tests. Proceedings of the 24th International Conference on Intelligent User Interfaces: Companion, 2019.
2018	CHI	Ye Tao, Jianzhe Gu, Byoungkwon An, Tingyu Cheng, Xiang 'Anthony' Chen, Xiaoxiao Zhang, Wei Zhao, Youngwook Do, Teng Zhang, Lining Yao. Demonstrating Thermorph: Democratizing 4D Printing of Self-Folding Materials and Interfaces. Proceedings of the Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems, 2018.
2016	TEI	Xiang 'Anthony' Chen. Making Fabrication Real. Proceedings of the 29th Annual Symposium on User Interface Software and Technology, 2016.

		Xiang 'Anthony' Chen. Making Fabrication Real. Proceedings of the 29th Annual Symposium on User Interface Software and Technology, 2016.
2015	СНІ	Anhong Guo, Xiang 'Anthony' Chen, Jeffrey P. Bigham. ApplianceReader: A Wearable, Crowdsourced, Vision-based System to Make Appliances Accessible. Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems, 2015.
2012	TEI	Xiang 'Anthony' Chen. Body-centric interaction with mobile devices. Proceedings of the 6th International Conference on Tangible and Embedded Interaction 2012, 2012.

# **Patents**

2022	Gierad Laput, Christopher Harrison, and Xiang 'Anthony' Chen. Method of Fabricating Soft Fibers Using Fused Deposition Modeling. U.S. Patent Application 15/772,193, issued filed April 5, 2022.	ď
2019	Yang Li, and Xiang 'Anthony' Chen. Cross-device interaction through user-demonstrated gestures. U.S. Patent 10,234,953, issued March 19, 2019.	ď
2018	Techniques For Interacting With Wearable Devices. Tovi Grossman, Xiang 'Anthony' Chen, George Fitzmaurice. U.S. Patent 10,082,953, issued September 25, 2018.	ď
2015	Techniques For Interacting With Handheld Devices. Tovi Grossman, Xiang 'Anthony' Chen, George Fitzmaurice. U.S. Patent 20,150,153,928, issued June 4, 2015.	
2015	Hrvoje Benko, Xiang Chen, and Kenneth Paul Hinckley. Motion and context sharing for pen-based computing inputs. U.S. Patent 9,201,520, issued December 1, 2015.	Ø

# Funding

2023	\$20,000	Salesforce gift funding Xiang 'Anthony' Chen (Sole PI)
2022-2025	\$510,000	ONR Young Investigator Award: Knowledge Extraction from Human Interaction with AI Xiang 'Anthony' Chen (Sole PI)
2022-2023	\$50,000	Intel Rising Star Award Xiang 'Anthony' Chen (Sole PI)
2022-2023	\$60,000	Google Research Scholar Award Xiang 'Anthony' Chen (Sole PI)
2022	\$50,000	Adobe gift funding Xiang 'Anthony' Chen (Sole PI)
2021-2026	\$548,111	NSF CAREER: Expanding the Interaction Bandwidth between Physicians and AI Xiang 'Anthony' Chen (Sole PI)

2021	\$20,000	Adobe gift funding Xiang 'Anthony' Chen (Sole PI)
2021-2022	\$19,500	Hellman Fellowship: Enabling an Ecosystem of Human-Centered Medical AI Xiang 'Anthony' Chen (Sole PI)
2019	\$5,000	Meta Technology Pte. Ltd. (Singapore) gift funding Xiang 'Anthony' Chen (Sole PI)
2019	\$7,500	Adobe gift funding Xiang 'Anthony' Chen (Sole PI)
2019-2021	\$200,460	NSF CRII: CHS: Techniques for Helping Domain Experts Understand and Improve Models Underlying Intelligent Systems Xiang 'Anthony' Chen (Sole PI)

C

# Press

2021

Research Conducted or Led by Me
---------------------------------

Wall Street Journal

PC World, Engadget, Gizmodo, etc.

2019	Turn any object into a robot using this program and a 3D printer  New Scientists
2019	Turn any object into a robot using this program and a 3D printer ACM TechNews
2015	3D print extra bits for old objects to help extend their life  New Scientists
Research Co	llaborated with Others
2016	SweepSense (collaborated with Gierad Laput) R&D Magazine, MIT Technology Review
2016	Snap to It (collaborated with Adrian de Freitas) MIT Technology Review
2015	3D Printed Hair (collaborated with Gierad Laput) Fast Company, CNET, Gizmodo, Hackaday, MIT Technology Review, Engadget, Plastics Today, New York Magazine
2014	Skin Buttons (collaborated with Gierad Laput) New York Times, TechCrunch, WIRED, Fast Company, New Scientist, Gizmodo, CBC
2014	Tablet+Stylus Interaction (collaborated with Ken Hinckley) FastCo Design's #2 User Interface Innovation of 2014
2012	The Fat Thumb (collaborated with Sebastian Boring)

Let's Redesign the Laptop for a Work-From-Home Era

# Talks

2023	Human-AI Collaborative Systems for the Future of Work Intel (hosted by Scott Buck)
2022	Thriving in an Information-Rich World through Human-AI Collaboration Department of Computer Science, University of Tokyo (hosted by Takeo Igarashi) Future University Hakodate (hosted by Hironari Yoshida)
2022	Expanding the Interaction Bandwidth Between Human and AI Center for Psychological Sciences at Zhejiang University (hosted by Liezhong Ge)
2020	Expanding the Interaction Bandwidth Between Human and AI Snap Research, U.S. (hosted by Rajan Vaish)
2020	Expanding the Interaction Bandwidth Between Human and AI Salesforce Research (hosted by Wenhao Liu)
2020	Expanding the Interaction Bandwidth Between Human and AI Media Arts and Technology Seminar, UC Santa Barbara
2019	Expanding the Interaction Bandwidth Between Human and AI Tsinghua University (hosted by Chun Yu) Peking University (hosted by Yizhou Wang) Fudan University (hosted by Tun Lu) Tongji University (hosted by Yang Shi) Sun Yat-Sen University South China University of Technology (hosted by C. L. Philip Chen) Xiamen University (hosted by Junfeng Yao)
2019	Designing Explainable Intelligent Systems The 5th Summer School on Computational Interaction, New York, U.S.
2018	Computational Tool Support for Mass Customization FXPAL, Palo Alto, U.S. (hosted by Daniel Avrahami)
2017	Computational Design and Fabrication to Augment Everyday Objects Dartmouth College, Hanover, U.S. (hosted by Xing-Dong Yang)
2016	Body-Centric Interaction with Mobile and Wearable Devices Body Hacking Con 2016, Austin, U.S.
2015	Enabling End-User Creativity with New Fabrication Techniques X-Studio, Tsinghua University, Beijing, China (hosted by Ying-Qing Xu
2015	Duet: Exploring Joint Interactions on a Smart Phone and a Smart Watch Midwest UX 2015, Pittsburgh, U.S.
2015	Snap-to-It: Using Mobile Cameras To Opportunistically Connect & Interact With An Internet Of Things QualComm, San Diego, U.S

2013	Motion and Context Sensing for Pen Computing David R. Cheriton School of Computer Science, University of Waterloo, Waterloo, Canada (hosted by Daniel Vogel)
2013	Motion and Context Sensing for Pen Computing Dynamic Graphics Project, University of Toronto, Toronto, Canada (hosted by Daniel Wigdor)
2013	Motion and Context Sensing for Pen Computing Autodesk Research, Toronto, Canada (hosted by Tovi Grossman)
2013	Around-Body Interaction Hasso-Plattner-Institut, Berlin, Germany (hosted by Patrick Baudisch)
2013	Around-Body Interaction QualComm, San Diego, U.S.

# **Teaching & Mentoring**

Course Instructor and Teaching Assistant

2020-Now	ECE 188	Interactive & Applied Machine Learning
2019-Now	ECE M119	Fundamental of Networked Embedded Systems
2018-Now	ECE 209AS	Human-Computer Interaction
2015-2015	05430	Programming Usable Interfaces School of Computer Science, Carnegie Mellon University
2014-2014	05410	User-Centered Research and Evaluation School of Computer Science, Carnegie Mellon University
2010-2010	CPSC 481	Human Computer Interaction I Department of Computer Science, University of Calgary

# Ph.D. Students Mentored

2022	Youngseung Jeon (UCLA ECE)
2020	Xingyu Liu (UCLA ECE)
2019	Ruolin Wang (UCLA ECE)
2019	Noyan Evirgen (UCLA ECE)
2018	Hongyan Gu (UCLA ECE)
2018	Jiahao Li (UCLA MAE)

#### Master Students Mentored

2016-Now Matthew Waliman (UCLA ECE)

Wayne Zhang (UCLA ECE) Roy Jara (UCLA ECE) Yifan Xu (UCLA ECE) Yao Xie (UCLA ECE)

Yifan Xu (UCLA ECE)
Yao Xie (UCLA ECE)
Yunpeng Ding (UCLA ECE)
Ritam Sarmah (UCLA CS)
Carlo Rebanal (UCLA ECE)
Amirali Omidfar (UCLA ECE)
Ximeng Liu (UCLA ECE)
Nicolas Cheng (UCLA ECE)
Vikram Cannanure (CMU CS)

## Undergraduate Students Mentored

2017-Now Faustine Wang (UCLA CogSci)

Ivy Kang (UCLA CogSci)
David Xiong (UCLA CS)
Austin Ma (UCLA CogSci)
Shirley Tang (UCLA CogSci)
Alexiy Samoylov (UCLA ECE)

James King (UCLA CS)
Eric Perez (UCLA ECE)
Grace Zhao (UCLA CS)
Jingbin Huang (UCLA ECE)

Melody Chen (UCLA CS) David Kao (UCLA CS) Ben Wagstaf (UCLA CS)

Joseph Lu (UCLA CS) Zixuan Chen (UCLA CS)

Jordan Combitsis (UCLA CS) Phipson Lee (UCLA CogSci/CS)

Runchang Kang (CMU Architecture)

### Intern & Visiting Students Mentored

2019-Now Naoto Nishida (University of Tokyo)

Zihan Yan (Zhejiang University)

Mina Huh (KAIST)

Hsuan-wei Fan (Tsinghua University) Yudai Tanaka (University of Tokyo) Xiao Fan (Zhejiang University) Bowen Zhang (Zhejiang University)

## Service

#### Ph.D. Thesis Committee

2020-Now Jeffrey Jiang (UCLA ECE)

Tonmoy Monsoor (UCLA ECE) Mahmoud Essalat (UCLA ECE) Vikranth Jeyakumar (UCLA ECE)

Haisong Lin (UCLA ECE) Migyeong Gwak (UCLA CS) Weinan Song (UCLA ECE)

#### Master Thesis Committee

2020-Now Oyku Bozkurt (UCLA ECE)

Steve Mendoza (UCLA ECE) Siyou Pei (UCLA ECE) Swapnil S. Saha (UCLA ECE)

Amirali Omidfar (UCLA ECE) Akash Singh (UCLA ECE)

## Pre-college Education & Outreach

Judge for International Science and Engineering Fair (for high school students)

#### Review Panel

2023-2023 Andy Hill CARE Fund

2021-2023 National Science Foundation

#### Editorial Board

2020-2020 ISS Proceedings of the ACM on Human-Computer Interaction

## Program Committee

2021-2022	CSCW	ACM Conference on Computer-Supported Cooperative Work and Social Computing
	OL II	
2019-2023	CHI	ACM CHI Conference on Human Factors in Computing Systems
2019-2021	UIST	ACM Symposium on User Interface Software and Technology
2019-2019	IUI	ACM International Conference on Intelligent User Interfaces

2018-2019 International Symposium of Chinese CHI

2018-2018 ISS ACM International Conference on Interactive Surfaces and Spaces

2016-2016 CHI LBW ACM CHI Conference on Human Factors in Computing Systems Late Breaking Work

## Organizing Committee

2021-2021 UIST Doctoral Consortium Chair

2020-2020 UIST Proceeding Chair

2020-2020 ECE ARR UCLA ECE Department Annual Research Review Co-Chair

2019-2020 ISS Publicity Chair

#### External Reviewer

2013-Now ACM CHI Conference on Human Factors in Computing Systems

ACM Symposium on User Interface Software and Technology

ACM Conference on Computer-Supported Cooperative Work and Social Computing

ACM Transactions on Computer-Human Interaction

International Conference on Computer Graphics and Interactive Techniques

International Conference On Human-Computer Interaction With Mobile Devices & Services

ACM International Conference on Tangible, Embedded and Embodied Interaction

ACM International Symposium on Wearable Computers

ACM International Joint Conference on Pervasive and Ubiquitous Computing

Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies

ACM SIGCHI Conference on Designing Interactive Systems

ACM International Conference on Interactive Tabletops and Surfaces

Annual Conference on Graphics Interface

International Conference on Mobile and Ubiquitous Multimedia

Annual Symposium on Computer-Human Interaction in Play

ACM Symposium on Spatial User Interaction

ACM International Conference on Intelligent User Interfaces

ACM International Conference on Interactive Media Experiences

ACM SIGCHI Symposium on Engineering Interactive Computing Systems

Interaction Design and Children Conference

**IEEE Pervasive Computing** 

International Journal of Human-Computer Studies

International Journal of Human-Computer Interaction

Annual Conference of the European Association for Computer Graphics

Computers & Graphics

Assistive Technology

IEEE Transactions on Mobile Computing

ACM Conference on Creativity & Cognition

NPJ Digital Medicine

### Special Recognition as a Reviewer

2014-Now CHI 2015-2016

UIST 2015-2016 Ubicomp 2016

CHI PLAY 2014