Xiang 'Anthony' Chen

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Last updated 6/2/2023

Current Position

2018 - 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

2006 - 2010 B.Eng. Zhejiang University

Department of Computer Science Chu Kochen Honors College

2010 Universidad Politécnica de Madrid

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

2003 - 2006 Affiliated High School of South China Normal University

Innovation Class student in Science

Awards

2023	CHI Best Paper Honorable Mention Award
2022	UIST Best Paper Award
2022	Intel Rising Star 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

Professional Experience

2021 - 2023	Visiting Professor	Salesforce Research Collaborated on multiple HCI + NLP projects
2022	Visiting Professor	Department of Computer Science University of Tokyo Collaborated with Prof. Takeo Igarashi's research group
2018	Research Scientist	Tableau Research, Palo Alto Enabling people to interact with data on mobile devices
2015	Research Intern	Google Research, Mountain View Mobile Interactive Computing Group with Yang Li Developed a user-defined cross-device interaction framework
2014	Research Intern	Microsoft Research, Redmond Natural Interaction Research Group with Bill Buxton and Ken Hinckley Developed a multi-wearable interactive system
2013	Research Intern	Autodesk Research, Toronto User Interface Research Group with Tovi Grossman, Daniel Wigdor, and George Fitzmaurice Developed interaction techniques with smart watches
2012	Research Intern	Microsoft Research, Redmond Natural Interaction Research Group with Ken Hinckley and Hrvoje Benko Developed motion and context sensing techniques for pen computing
2010	Research Intern	Microsoft Research Asia, Beijing Media Computing Group with Bin B. Zhu Developed novel CAPTCHA techniques and systems
2009	Engineering Intern	Alibaba Group, Hangzhou Quality Assurance Group Developed routines for testing data-centric web-based programs

Conference & Journal Publications

		& Journal Papers CHI: 19; UIST: 15; TOCHI: 2; CSCW: 1; IMWUT: 1; Other venues: 19
2023	LNCS	Detecting Mitoses with a Convolutional Neural Network for MIDOG 2022 Challenge. Hongyan Gu, Mohammad Haeri, Shuo Ni, Christopher Kazu Williams, Neda Zarrin-Khameh, Shino Magaki, Xiang 'Anthony' Chen 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.
2023	MobileHCI	NaCanva: Exploring and Enabling the Nature-Inspired Creativity for Children Zihan Yan, Yanhong Wu, Danli Luo, Chao Zhang, Qihang Jin, Wei Chen, Yingcai Wu, Xiang 'Anthony' Chen, Guanyun Wang, Haipeng Mi To appear at MobileHCI '23
2023	GI	RelRoll: A Relative Elicitation Mechanism for Scoring Annotation with A Case Study on Speech Emotion Yijun Zhou, JinHong Lu, Xiang 'Anthony' Chen, Chia-Ming Chang, Takeo Igarashi To appear at Graphics Interface '23
2023	СНІ	Augmenting Pathologists with NaviPath: Design and Evaluation of a Human-Al Collaborative Navigation System Hongyan Gu, Chunxu Yang, Mohammad Haeri, Jing Wang, Shirley Tang, Wenzhong Yan, Shujin He, Christopher Kazu Williams, Shino Magaki, Xiang 'Anthony' Chen To appear at CHI '23. Best Paper Honorable Mention Award
2023	СНІ	AVscript: Accessible Video Editing with Audio-Visual Scripts Mina Huh, Saelyne Yang, Yi-Hao Peng, Xiang 'Anthony' Chen, Young-Ho Kim, Amy Pavel To appear at CHI '23.
2023	CHI	Visual Captions: Augmenting Verbal Communication with On-the-fly Visuals Xingyu "Bruce" Liu, Vladimir Kirilyuk, Xiuxiu Yuan, Alex Olwal, Peggy Chi, Xiang 'Anthony' Chen, Ruofei Du To appear at CHI '23.
2023	CHI	Designing and Evaluating Interfaces that Highlight News Coverage Diversity Using Discord Questions Philippe Laban, Chien-Sheng Wu, Lidiya Murakhovs'ka, Xiang 'Anthony' Chen, Caiming Xiong To appear at CHI '23.
2023	CHI	GANravel: User-Driven Direction Disentanglement in Generative Adversarial Networks Noyan Evirgen, Xiang 'Anthony' Chen To appear at CHI '23.
2022	TOCHI	Improving Workflow Integration with xPath: Design and Evaluation of a Human-Al Diagnosis System in Pathology 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, Mohammad Haeri, Xiang 'Anthony' Chen ACM Trans. Comput. Hum. Interact., 2022
2022	EMNLP	Discord Questions: A Computational Approach To Diversity Analysis in News Coverage Philippe Laban, Chien-Sheng Wu, Lidiya Murakhovs'ka, Xiang 'Anthony' Chen, Caiming Xiong Proceedings of the Findings of the Association for Computational Linguistics: EMNLP 2022
2022	UIST	GANzilla: User-Driven Direction Discovery in Generative Adversarial Networks Noyan Evirgen, Xiang `Anthony' Chen Proceedings of the UIST '22: The 35rd Annual ACM Symposium on User Interface Software and Technology, 2022

2022	UIST	CrossA11y: Identifying Video Accessibility Issues via Cross-modal Grounding Xingyu "Bruce" Liu, Ruolin Wang, Dingzeyu Li, Xiang 'Anthony' Chen, Amy Pavel Proceedings of the UIST '22: The 35rd Annual ACM Symposium on User Interface Software and Technology, 2022 Best Paper Award
2022	IMWUT	Shoes++: A Smart Detachable Sole for Social Foot-to-foot Interaction 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 Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies
2022	CHI	EmoGlass: an End-to-End Al-Enabled Wearable Platform for Enhancing Self-Awareness of Emotional Health Zihan Yan, Yufei Wu, Yang Zhang, Xiang 'Anthony' Chen Proceedings of the CHI '22: CHI Conference on Human Factors in Computing Systems, New Orleans, LA, USA, 29 April 2022, 2022
2022	CHI	Roman: Making Everyday Objects Robotically Manipulable with 3D-Printable Add-on Mechanisms Jiahao Li, Alexis Samoylov, Jeeeun Kim, Xiang 'Anthony' Chen Proceedings of the CHI '22: CHI Conference on Human Factors in Computing Systems, New Orleans, LA, USA, 29 April 2022, 2022
2022	СНІ	Mobiot: Augmenting Everyday Objects into Moving IoT Devices Using 3D Printed Attachments Generated by Demonstration Abul Al Arabi, Jiahao Li, Xiang 'Anthony' Chen, Jeeeun Kim Proceedings of the CHI '22: CHI Conference on Human Factors in Computing Systems, New Orleans, LA, USA, 29 April 2022, 2022
2021	CSCW	Lessons Learned from Designing an Al-Enabled Diagnosis Tool for Pathologists Hongyan Gu, Jingbin Huang, Lauren Hung, Xiang 'Anthony' Chen Proc. ACM Hum. Comput. Interact., 2021
2021	TEI	OmniSoft: A Design Tool for Soft Objects by Example Jeeeun Kim, Qingnan Zhou, Amanda Ghassaei, Xiang 'Anthony' Chen Proceedings of the TEI '21: Fifteenth International Conference on Tangible, 2021
2021	IUI	XAlgo: a Design Probe of Explaining Algorithms' Internal States via Question-Answering Juan Carlo Rebanal, Jordan Combitsis, Yuqi Tang, Xiang 'Anthony' Chen Proceedings of the IUI '21: 26th International Conference on Intelligent User Interfaces, 2021
2021	IUI	OralViewer: 3D Demonstration of Dental Surgeries for Patient Education with Oral Cavity Reconstruction from a 2D Panoramic X-ray Yuan Liang, Liang Qiu, Tiancheng Lu, Zhujun Fang, Dezhan Tu, Jiawei Yang, Yiting Shao, Kun Wang, Xiang 'Anthony' Chen, Lei He Proceedings of the IUI '21: 26th International Conference on Intelligent User Interfaces, 2021
2021	CHI	Revamp: Enhancing Accessible Information Seeking Experience of Online Shopping for Blind or Low Vision Users Ruolin Wang, Zixuan Chen, Mingrui Ray Zhang, Zhaoheng Li, Zhixiu Liu, Zihan Dang, Chun Yu, Xiang 'Anthony' Chen Proceedings of the CHI '21: CHI Conference on Human Factors in Computing Systems, 2021
2021	CHI	What Makes Videos Accessible to Blind and Visually Impaired People? Xingyu Liu, Patrick Carrington, Xiang 'Anthony' Chen, Amy Pavel Proceedings of the CHI '21: CHI Conference on Human Factors in Computing Systems, 2021
2020	VRST	DualVib: Simulating Haptic Sensation of Dynamic Mass by Combining Pseudo-Force and Texture Feedback Yudai Tanaka, Arata Horie, Xiang 'Anthony' Chen Proceedings of the VRST '20: 26th ACM Symposium on Virtual Reality Software and Technology, 2020

2020	UIST	Geno: A Developer Tool for Authoring Multimodal Interaction on Existing Web Applications Ritam Jyoti Sarmah, Yunpeng Ding, Di Wang, Cheuk Yin Phipson Lee, Toby Jia-Jun Li, Xiang 'Anthony' Chen Proceedings of the UIST '20: The 33rd Annual ACM Symposium on User Interface Software and Technology, 2020
2020	UIST	Romeo: A Design Tool for Embedding Transformable Parts in 3D Models to Robotically Augment Default Functionalities Jiahao Li, Meilin Cui, Jeeeun Kim, Xiang 'Anthony' Chen Proceedings of the UIST '20: The 33rd Annual ACM Symposium on User Interface Software and Technology, 2020
2020	СНІ	OralCam: Enabling Self-Examination and Awareness of Oral Health Using a Smartphone Camera Yuan Liang, Hsuan-Wei Fan, Zhujun Fang, Leiying Miao, Wen Li, Xuan Zhang, Weibin Sun, Kun Wang, Lei He, Xiang Anthony Chen Proceedings of the CHI '20: CHI Conference on Human Factors in Computing Systems, 2020 Best Paper Honorable Mention Award
2020	CHI	CheXplain: Enabling Physicians to Explore and Understand Data-Driven, Al-Enabled Medical Imaging Analysis Yao Xie, Melody Chen, David Kao, Ge Gao, Xiang 'Anthony' Chen Proceedings of the CHI '20: CHI Conference on Human Factors in Computing Systems, 2020
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
2019	SUI	Minuet: Multimodal Interaction with an Internet of Things Runchang Kang, Anhong Guo, Gierad Laput, Yang Li, Xiang 'Anthony' Chen Proceedings of the Symposium on Spatial User Interaction, 2019
2018	UIST	Orecchio: Extending Body-Language through Actuated Static and Dynamic Auricular Postures Da-Yuan Huang, Teddy Seyed, Linjun Li, Jun Gong, Zhihao Yao, Yuchen Jiao, Xiang 'Anthony' Chen, Xing-Dong Yang Proceedings of the 31st Annual ACM Symposium on User Interface Software and Technology, 2018
2018	CHI	WrisText: One-handed Text Entry on Smartwatch using Wrist Gestures Jun Gong, Zheer Xu, Qifan Guo, Teddy Seyed, Xiang 'Anthony' Chen, Xiaojun Bi, Xing-Dong Yang Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems, 2018 Best Paper Honorable Mention Award
2018	CHI	Forte: User-Driven Generative Design Xiang 'Anthony' Chen, Ye Tao, Guanyun Wang, Runchang Kang, Tovi Grossman, Stelian Coros, Scott E. Hudson Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems, 2018
2018	СНІ	Medley: A Library of Embeddables to Explore Rich Material Properties for 3D Printed Objects Xiang 'Anthony' Chen, Stelian Coros, Scott E. Hudson Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems, 2018
2018	CHI	Thermorph: Democratizing 4D Printing of Self-Folding Materials and Interfaces 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 Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems, 2018
2017	TOCHI	Improv: An Input Framework for Improvising Cross-Device Interaction by Demonstration Xiang 'Anthony' Chen, Yang Li ACM Trans. Comput. Hum. Interact., 2017
2017	СНІ	Facade: Auto-generating Tactile Interfaces to Appliances Anhong Guo, Jeeeun Kim, Xiang 'Anthony' Chen, Tom Yeh, Scott E. Hudson, Jennifer Mankoff, Jeffrey P. Bigham Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems, 2017

2016	UIST	VizLens: A Robust and Interactive Screen Reader for Interfaces in the Real World Anhong Guo, Xiang 'Anthony' Chen, Haoran Qi, Samuel White, Suman Ghosh, Chieko Asakawa, Jeffrey P. Bigham Proceedings of the 29th Annual Symposium on User Interface Software and Technology, 2016
2016	UIST	Bootstrapping User-Defined Body Tapping Recognition with Offline-Learned Probabilistic Representation Xiang 'Anthony' Chen, Yang Li Proceedings of the 29th Annual Symposium on User Interface Software and Technology, 2016
2016	UIST	Reprise: A Design Tool for Specifying, Generating, and Customizing 3D Printable Adaptations on Everyday Objects Xiang 'Anthony' Chen, Jeeeun Kim, Jennifer Mankoff, Tovi Grossman, Stelian Coros, Scott E. Hudson Proceedings of the 29th Annual Symposium on User Interface Software and Technology, 2016
2016	IUI	SweepSense: Ad Hoc Configuration Sensing Using Reflected Swept-Frequency Ultrasonics Gierad Laput, Xiang 'Anthony' Chen, Chris Harrison Proceedings of the 21st International Conference on Intelligent User Interfaces, 2016
2016	GI	Twist 'n' Knock: A One-handed Gesture for Smart Watches Vikram Cannanure, Xiang 'Anthony' Chen, Jennifer Mankoff Proceedings of the 42nd Graphics Interface Conference, Victoria, BC, Canada, 1-3 June 2016, 2016
2016	СНІ	Snap-To-It: A User-Inspired Platform for Opportunistic Device Interactions Adrian A. de Freitas, Michael Nebeling, Xiang 'Anthony' Chen, Junrui Yang, Akshaye Shreenithi Kirupa Karthikeyan Ranithangam, Anind K. Dey Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, 2016
2015	UIST	3D Printed Hair: Fused Deposition Modeling of Soft Strands, Fibers, and Bristles Gierad Laput, Xiang 'Anthony' Chen, Chris Harrison Proceedings of the 28th Annual ACM Symposium on User Interface Software & Technology, 2015
2015	UIST	Encore: 3D Printed Augmentation of Everyday Objects with Printed-Over, Affixed and Interlocked Attachments Xiang 'Anthony' Chen, Stelian Coros, Jennifer Mankoff, Scott E. Hudson Proceedings of the 28th Annual ACM Symposium on User Interface Software & Technology, 2015
2015	MobileHCI	Typing on Glasses: Adapting Text Entry to Smart Eyewear Tovi Grossman, Xiang 'Anthony' Chen, George W. Fitzmaurice Proceedings of the 17th International Conference on Human-Computer Interaction with Mobile Devices and Services, 2015
2014	UIST	Skin buttons: cheap, small, low-powered and clickable fixed-icon laser projectors Gierad Laput, Robert Xiao, Xiang 'Anthony' Chen, Scott E. Hudson, Chris Harrison Proceedings of the 27th Annual ACM Symposium on User Interface Software and Technology, 2014
2014	UIST	Sensing techniques for tablet+stylus interaction Ken Hinckley, Michel Pahud, Hrvoje Benko, Pourang Irani, François Guimbretière, Marcel Gavriliu, Xiang 'Anthony' Chen, Fabrice Matulic, William Buxton, Andrew Wilson Proceedings of the 27th Annual ACM Symposium on User Interface Software and Technology, 2014 Best Paper Award
2014	UIST	Air+touch: interweaving touch & in-air gestures Xiang 'Anthony' Chen, Julia Schwarz, Chris Harrison, Jennifer Mankoff, Scott E. Hudson Proceedings of the 27th Annual ACM Symposium on User Interface Software and Technology, 2014
2014	UIST	Swipeboard: a text entry technique for ultra-small interfaces that supports novice to expert transitions Xiang 'Anthony' Chen, Tovi Grossman, George W. Fitzmaurice Proceedings of the 27th Annual ACM Symposium on User Interface Software and Technology, 2014

2014	MobileHCI	Around-body interaction: sensing & interaction techniques for proprioception-enhanced input with mobile devices Xiang 'Anthony' Chen, Julia Schwarz, Chris Harrison, Jennifer Mankoff, Scott E. Hudson Proceedings of the 16th international conference on Human-computer interaction with mobile devices & services, 2014
2014	CHI	Duet: exploring joint interactions on a smart phone and a smart watch Xiang 'Anthony' Chen, Tovi Grossman, Daniel J. Wigdor, George W. Fitzmaurice Proceedings of the CHI Conference on Human Factors in Computing Systems, 2014 Best Paper Award
2013	GI	Motion and context sensing techniques for pen computing Ken Hinckley, Xiang 'Anthony' Chen, Hrvoje Benko Proceedings of the Graphics Interface 2013, 2013
2012	MobileHCI	Extending a mobile device's interaction space through body-centric interaction Xiang 'Anthony' Chen, Nicolai Marquardt, Anthony Tang, Sebastian Boring, Saul Greenberg Proceedings of the Mobile HCI '12, 2012
2012	MobileHCI	The fat thumb: using the thumb's contact size for single-handed mobile interaction Sebastian Boring, David Ledo, Xiang 'Anthony' Chen, Nicolai Marquardt, Anthony Tang, Saul Greenberg Proceedings of the Mobile HCI '12, 2012
2013	Visual Computer	Perception-motivated visualization for 3D city scenes Bin Pan, Yong Zhao, Xiaoming Guo, Xiang Chen, Wei Chen, Qunsheng Peng The Visual Computer. 29.4 (2013): 277-286
2012	AVI	Spalendar: visualizing a group's calendar events over a geographic space on a public display Xiang 'Anthony' Chen, Sebastian Boring, Sheelagh Carpendale, Anthony Tang, Saul Greenberg Proceedings of the International Working Conference on Advanced Visual Interfaces, 2012
2011	CAD/CG	Interactive Expressive Illustration of 3D City Scene Bin Pan, Xiang Chen, Xiaoming Guo, Wei Chen, Qunsheng Peng Proc. CAD/Graphics 2011

Other Publications

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2017 Ph.D. Making Fabrication Real: Fabrication for Real Usage, with Real Objects, by Real People Doctoral dissertation, Carnegie Mellon University

2012 M.Sc. Body-Centric Interaction with a Screen-based Handheld Device Master's thesis, University of Calgary

Book Chapters

2021 Yuan Liang, Lei He, Xiang 'Anthony' Chen Human-Centered Al 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 CACM Consumer-grade fabrication and its potential to revolutionize accessibility

Jennifer Mankoff, Megan Hofmann, Xiang 'Anthony' Chen, Scott E. Hudson, Amy Hurst, Jeeeun Kim Commun. ACM, 2019

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

2023 CHI ChatGPT for Moderating Customer Inquiries and Responses to Alleviate Stress and Reduce Emotional

Dissonance of Customer Service Representatives

Hyung-Kwon Ko, Kihoon Son, Hyoungwook Jin, Yoonseo Choi, Xiang 'Anthony' Chen

CHI Gen-Al workshop 2023

2023 CHI A Field Study on Pedestrians' Thoughts toward a Car with Gazing Eyes

Xinyue Gui, Koki Toda, Stela H. Seo, Felix Martin Eckert, Chia-Ming Chang, Xiang 'Anthony' Chen,

Takeo Igarashi

Proceedings of the Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems, 2018

Gystems, 2010

2022 MICCAI Detecting Mitoses with a Convolutional Neural Network for MIDOG 2022 Challenge

Hongyan Gu, Mohammad Haeri, Shuo Ni, Christopher Kazu Williams, Neda Zarrin-Khameh, Shino

Magaki, Xiang 'Anthony' Chen

MIDOG 2022 Workshop of MICCAI 2022

2020 UIST Counterweight: Diversifying News Consumption

Eric Balagtas Perez, James King, Yugo H. Watanabe, Xiang 'Anthony' Chen

Proceedings of the UIST '20 Adjunct: The 33rd Annual ACM Symposium on User Interface Software and Technology, 2020

2019 IUI Outlining the Design Space of Explainable Intelligent Systems for Medical Diagnosis

Yao Xie, Xiang 'Anthony' Chen, Ge Gao

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 Automatic exam grading by a mobile camera: snap a picture to grade your tests

Benjamin Wagstaff, Chiao Lu, Xiang 'Anthony' Chen

Proceedings of the 24th International Conference on Intelligent User Interfaces: Companion, 2019

2018 CHI Demonstrating Thermorph: Democratizing 4D Printing of Self-Folding Materials and Interfaces

Ye Tao, Jianzhe Gu, Byoungkwon An, Tingyu Cheng, Xiang 'Anthony' Chen, Xiaoxiao Zhang, Wei

Zhao, Youngwook Do, Teng Zhang, Lining Yao

Proceedings of the Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing

Systems, 2018

2016 TEI Making Fabrication Real

Xiang 'Anthony' Chen

Proceedings of the 29th Annual Symposium on User Interface Software and Technology, 2016

2015 CHI ApplianceReader: A Wearable, Crowdsourced, Vision-based System to Make Appliances Accessible Anhong Guo, Xiang 'Anthony' Chen, Jeffrey P. Bigham
Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in
Computing Systems, 2015

2012 TEI Body-centric interaction with mobile devices

Xiang 'Anthony' Chen
Proceedings of the 6th International Conference on Tangible and Embedded Interaction 2012, 2012

Patents

- Method of Fabricating Soft Fibers Using Fused Deposition Modeling
 Gierad Laput, Christopher Harrison, and Xiang 'Anthony' Chen
 U.S. Patent Application 15/772,193, issued filed April 5, 2022
- Cross-device interaction through user-demonstrated gestures
 Yang Li, and Xiang 'Anthony' Chen
 U.S. Patent 10,234,953, issued March 19, 2019
- Zo18 Techniques For Interacting With Wearable Devices
 Tovi Grossman, Xiang 'Anthony' Chen, George Fitzmaurice
 U.S. Patent 10,082,953, issued September 25, 2018
- Z015 Techniques For Interacting With Handheld Devices
 Tovi Grossman, Xiang 'Anthony' Chen, George Fitzmaurice
 U.S. Patent 20,150,153,928, issued June 4, 2015
- Motion and context sharing for pen-based computing inputs
 Hrvoje Benko, Xiang Chen, and Kenneth Paul Hinckley
 U.S. Patent 9,201,520, issued December 1, 2015.

Funding

	Total to-date:	\$1,460,571
2023	\$20,000	Salesforce gift funding 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	\$20,000	Adobe gift funding Xiang 'Anthony' Chen (Sole PI)
2022 - 2025	\$510,000	ONR Young Investigator Award: Knowledge Extraction from Human Interaction with Al Xiang 'Anthony' Chen (Sole PI)
2021 - 2026	\$548,111	NSF CAREER: Expanding the Interaction Bandwidth between Physicians and Al Xiang 'Anthony' Chen (Sole PI)
2021	\$19,500	Hellman Fellowship: Enabling an Ecosystem of Human-Centered Medical Al Xiang 'Anthony' Chen (Sole PI)
2021	\$20,000	Adobe gift funding Xiang 'Anthony' Chen (Sole PI)
2019 - 2021	\$200,460	Xiang 'Anthony' Chen (Sole PI) NSF CRII: CHS: Techniques for Helping Domain Experts Understand and Improve Models Underlying Intelligent Systems
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)

Press

	Research Conducted or Led by Me			
2021	Wall Street Journal	Let's Redesign the Laptop for a Work-From-Home Era		
2019	New Scientists	Turn any object into a robot using this program and a 3D printer		
2019	ACM TechNews	Turn any object into a robot using this program and a 3D printer		
2019	Hackster.io	Robiot Is a Design Tool That Generates Mechanisms to Motorize Everyday Objects		
2019	Innovation Cloud	Innovation that will turn everyday objects into robots		
2019	Fabbaloo	Robiot Can Automatically Design Handy Household Machines		
2018	3ders.org	Forté: user-driven generative design tool for easy optimization of 3D printed objects		
2018	All3DP	Forté Lets you Draw in 2D, Creates 3D Generative Designs Automatically		
2018	3DShoes.com	Forté Design Tool		
2018	FutureLab3D	Forte: user-driven generative design tool for easy optimization of 3D printed objects		
2018	3D Adept	Forte, the generative design tool that will ease the optimization of 3D printed objects		
2018	3dimensions.kr	3D design software that makes your design look like: Forté (Translated from Korean)		
2018	STAMPARE IN 3D	Anthony Chen e lo strumento di disegno interattivo Forté		
2016	Branchema- gasinet UDKOM.	3D-printere reparerer ting		
2016	DIY 3D Printing	Encore 3D Printing Upgrades for Everyday Objects		
2015	3dprint.com	Sustainable 3D Printing Methods Add to or Subtract from Existing Objects		
2015	New Scientists	3D print extra bits for old objects to help extend their life		
2015	3ders.org	Researchers develop Encore tool for augmenting everyday objects with 3D printing		
2015	3dprint.com	Encore: Research Allows for 3D Printed Augmentation of Everyday Objects		
2015	3dtectonix.com	Encore Webgl-Based Tool and 3D Printing Improve Everyday Objects		
2014	labs.blogs.com	Duet: Exploring Joint Interactions on a Smart Phone and a Smart Watch		
2013	sourcebits.com	How an Innovative Mobile Interaction Concept Could Benefit Enterprises		
	Research Collabora	ated with Others		
2018		Orecchio (collaborated with Xing-Dong Yang's group)		
		EureAlert, Phys.Org, Dartmouth Press		
2018		WrisText (collaborated with Xing-Dong Yang's group)		
		Discovery's Daily Planet, QUARTZ, Weather Science, EureAlert		
2010		Theremorph (collaborated with Lining Vee's group)		
2018		Theromorph (collaborated with Lining Yao's group) CMU News, dezeen, ZDNet, ALL3DP		
		Civio News, dezeeli, ZDNet, ALLSDF		
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)		
2013		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)		
2017		FastCo Design's #2 User Interface Innovation of 2014		
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2012		The Fat Thumb (collaborated with Sebastian Boring)		

PC World, Engadget, Gizmodo, etc.

Talks	
2023	Al-in-the-Loop: Catalyzing Advances in Al to Augment Human Activities Keynote, ICML 2023 Workshop: Artificial Intelligence & Human Computer Interaction
2023	Human-Al Collaborative Systems for the Future of Work Intel (hosted by Scott Buck)
2022	Thriving in an Information-Rich World through Human-Al 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 Al Center for Psychological Sciences at Zhejiang University (hosted by Liezhong Ge)
2020	Expanding the Interaction Bandwidth Between Human and Al Snap Research, U.S. (hosted by Rajan Vaish)
2020	Expanding the Interaction Bandwidth Between Human and Al Salesforce Research (hosted by Wenhao Liu)
2020	Expanding the Interaction Bandwidth Between Human and Al 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	W	G 10 10 10 10 10 10 10 10 10 10 10 10 10

Corse Instructor 2023 -Capstone Project Master of Engineering School of Engineering, UCLA 2020 -**ECE 188** Interactive & Applied Machine Learning ECE Department, UCLA 2019 -CS/ECE M119 Fundamental of Networked Embedded Systems ECE Department, UCLA 2018 -ECE 209AS **Human-Computer Interaction** ECE Department, UCLA Teaching Assistant 2015 05430 Programming Usable Interfaces School of Computer Science, Carnegie Mellon University 2014 05410 User-Centered Research and Evaluation School of Computer Science, Carnegie Mellon University Human Computer Interaction I 2010 CPSC 481 Department of Computer Science, University of Calgary Ph.D. Students Mentored at UCLA 2022 -Youngseung Jeon Al-Enabled Creativity Support Tools 2020 -Augmenting Human Activities with Proactive Al Xingyu Liu Making Information Accessible to Break the Cycle of Exclusion in Society 2019 -Ruolin Wang 2019 -Noyan Evirgen Human-Centered, Interactive Generative Al 2018 -Hongyan Gu Supporting Diagnosis of Pathologists with Human-Al Collaboration **UCLA ECE Dissertation Year Fellowship** 2018 -Jiahao Li Making Physical Objects Interactive with Low-cost Sensing and Robotic Augmentation 2018 -Master Students Mentored at UCLA Matthew Waliman Al-enabled creativity support tools Rikako Hatoya Al-augmented human commiunication Xingyu Liu Human-Al Systems for Video Accessibility **UCLA School of Engineering ED Rice Outstanding Master Student Award UCLA ECE Distinguished Master's Thesis Research Award** Amazon PhD Fellowship Wayne Zhang Crowd-powered accessibile online videos Roy Jara Al-enabled expressive writing Yifan Xu Human-Al collaboration for pathology Yao Xie Explainable Al-enabled radiology Yunpeng Ding Explaining algorithms using question-answering Ritam Sarmah Programming tools for voice input Carlo Rebanal Explaining algorithms using question-answering Amirali Omidfar Finger-worn camera interaction with IoTs Ximeng Liu Finger-worn camera interaction with IoTs Nicolas Cheng Finger-worn camera interaction with IoTs 2018 -Undergraduate Students Mentored at UCLA Human-Al storytelling **Faustine Wang** Ivy Kang Al-assisted meetings David Xiong Reading long texts as short tweets

Making everyday objects more manipulable by robots

Alexiy Samoylov

James King Diversifying news consumption
Eric Perez Diversifying news consumption

Jingbin Huang Human-Al collaboration for pathology
Melody Chen Explainable Al-enabled radiology
David Kao Explainable Al-enabled radiology

Ben Wagstaf Automatic exam grading using a mobile camera

Joseph Lu Automatic exam grading using a mobile camera

Zixuan Chen Making online products visually accessible to blind people

Jordan Combitsis Explaining algorithms using question-answering Phipson Lee Explaining algorithms using question-answering

2019 - Intern & Visiting Students Mentored at UCLA

Naoto Nishida Al-augmented human commiunication Zihan Yan Wearable sensing of emotional states

Hsuan-wei Fan Detecting oral diseases with a mobile camera

Mina Huh Making video editing accessible to blind people

Xiao Fan Low-cost sensor-equipped stethoscope
Bowen Zhang Physical therapy using a webcam

2015 - 2017 Students Mentored During Ph.D. Study at CMU

Runchang Kang User-driven generative design

Vikram Cannanure Knocking gestures for smart watches

Service

Ph.D. Thesis Committee (other than my students) 2020 -ECE Department, UCLA Jeffrey Jiang Tonmoy Monsoor ECE Department, UCLA Vikranth Jeyakumar ECE Department, UCLA ECE Department, UCLA Haisong Lin Migyeong Gwak CS Department, UCLA Weinan Song ECE Department, UCLA M.S. Thesis Committee 2020 -Oyku Bozkurt ECE Department, UCLA Steve Mendoza ECE Department, UCLA Siyou Pei ECE Department, UCLA Swapnil S. Saha ECE Department, UCLA Amirali Omidfar ECE Department, UCLA Akash Singh ECE Department, UCLA Pre-college Education 2020 Judge for International Science and Engineering Fair (for high school students) Review Panel 2023 Andy Hill CARE Fund 2021 - 2022 National Science Foundation Editorial Board 2020 ISS Proceedings of the ACM on Human-Computer Interaction Program Committee 2019 - 2023 CHI ACM CHI Conference on Human Factors in Computing Systems 2021 - 2022 CSCW ACM Conference on Computer-Supported Cooperative Work and Social Computing 2019 - 2021 UIST ACM Symposium on User Interface Software and Technology 2019 IUI ACM International Conference on Intelligent User Interfaces 2018 ISS ACM International Conference on Interactive Surfaces and Spaces 2018 - 2019 ChineseCHI International Symposium of Chinese CHI 2016 CHI LBW ACM CHI Conference on Human Factors in Computing Systems Late Breaking Work Organizing Committee 2021 UIST **Doctoral Consortium Chair** 2020 UIST **Proceeding Chair** 2019 - 2020 ISS **Publicity Chair** 2020 ECE ARR UCLA ECE Department Annual Research Review Co-Chair External Reviewer 2013 - 2018 CHI ACM CHI Conference on Human Factors in Computing Systems 2013 - 2022 UIST ACM Symposium on User Interface Software and Technology 2014 - 2016 CSCW ACM Conference on Computer-Supported Cooperative Work and Social Computing 2014 - 2019 TOCHI ACM Transactions on Computer-Human Interaction 2019 SIGGRAPH International Conference on Computer Graphics and Interactive Techniques 2013 2020 MobileHCI International Conference On Human-Computer Interaction With Mobile Devices & 2013 - 2016 TEI ACM International Conference on Tangible, Embedded and Embodied Interaction

2015	ISWC	ACM International Symposium on Wearable Computers
2016	Ubicomp	ACM International Joint Conference on Pervasive and Ubiquitous Computing
2017 - 2018	IMWUT	Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies
2014 - 2019	DIS	ACM SIGCHI Conference on Designing Interactive Systems
2013 - 2015	ITS	ACM International Conference on Interactive Tabletops and Surfaces
2012 - 2016	GI	Annual Conference on Graphics Interface
2013	MUM	International Conference on Mobile and Ubiquitous Multimedia
2014	CHI PLAY	Annual Symposium on Computer-Human Interaction in Play
2014 - 2015	SUI	ACM Symposium on Spatial User Interaction
2014 - 2015	IUI	ACM International Conference on Intelligent User Interfaces
2015 - 2017	TVX	ACM International Conference on Interactive Media Experiences
2015	EICS	ACM SIGCHI Symposium on Engineering Interactive Computing Systems
2015	IDC	Interaction Design and Children Conference
2016 - 2020		IEEE Pervasive Computing
2017 - 2021	IJHCS	International Journal of Human-Computer Studies
2018	IJHCI	International Journal of Human–Computer Interaction
2015	EuroGraphics	Annual Conference of the European Association for Computer Graphics
2018	C&G	Computers & Graphics
2019	AT	Assistive Technology
2017	TMC	IEEE Transactions on Mobile Computing
2015	C&C	ACM Conference on Creativity & Cognition
2020		NPJ Digital Medicine

Special Recognition as a Reviewer

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CHI	ACM CHI Conference on Human Factors in Computing Systems
UIST	ACM Symposium on User Interface Software and Technology
Ubicomp	ACM International Joint Conference on Pervasive and Ubiquitous Computing
CHI PLAY	Annual Symposium on Computer-Human Interaction in Play
	UIST Ubicomp