Xiang 'Anthony' Chen

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Current Position

2024-Now	Associate Professor	Department of Electrical & Computer Engineering Department of Computer Science (By courtesy) UCLA
2018-2024	Assistant Professor	Department of Electrical & Computer Engineering 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

2024	CHI Best Paper Honorable Mention Award
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 Won by Students

2025	Xingyu Liu - UCLA ECE Dissertation Year Fellowship
2024	Hongyan Gu - CESASC Scholarship
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 Professor	Department of Computer Science University of Tokyo Collaborated with Prof. Takeo Igarashi's research group
2021-2023	Visiting Professor	Salesforce Research Collaborated on multiple HCI + NLP projects
2018-2018	Research Scientist	Tableau Research, Palo Alto Enabling people to interact with data on mobile devices
2015-2015	Research Intern	Google Research, Mountain View Mobile Interactive Computing Group with Yang Li Developed a user-defined cross-device interaction framework

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

Publications

Conferences & Journals

2025	ISBI	Hongyan Gu, Ellie Onstott, Wenzhong Yan, Tengyou Xu, Ruolin Wang, Zida Wu, **Xiang 'Anthony' Chen**, Mohammad Haeri. Z-Stack Scanning can Improve AI Detection of Mitosis: A Case Study of Meningiomas. 2025 IEEE International Symposium on Biomedical Imaging.
2025	NAACL	Ziwen Li, **Xiang 'Anthony' Chen**, and Youngseung Jeon. 2025. GraPPI: A Retrieve-Divide-Solve GraphRAG Framework for Large-scale Protein-protein Interaction Exploration. In Findings of the Association for Computational Linguistics: NAACL 2025.
2025	IUI	Youngseung Jeon, Christopher Hwang, **Xiang 'Anthony' Chen**. Empowering Medical Data Labeling for Non-Experts with DANNY: Enhancing Accuracy and Mitigating Over-Reliance on AI. In Proceedings of the 30th International Conference on Intelligent User Interfaces.
2025	CHI	Xingyu Bruce Liu, Shitao Fang, Weiyan Shi, Chien-Sheng Wu, Takeo Igarashi, **Xiang 'Anthony' Chen**. Proactive Conversational Agents with Inner Thoughts. In Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems.
2024	IUI	Noyan Evirgen, Ruolin Wang, **Xiang 'Anthony' Chen**. From Text to Pixels: Enhancing User Understanding through Text-to-Image Model Explanations. In Proceedings of the 29th International Conference on Intelligent User Interfaces.

2024	CHI	Xingyu Bruce Liu, Jiahao Nick Li, David Kim, **Xiang 'Anthony' Chen**, Ruofei Du. Human I/O: Towards a Unified Approach to Detecting Situational Impairments. In Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems. **Best Paper Honorable Mention Award**
2024	ANC	Hongyan Gu, Chunxu Yang, Issa Al-kharouf, Shino Magaki, Nelli Lakis, Christopher Kazu Williams, Sallam Mohammad Alrosan, Ellie Kate Onstott, Wenzhong Yan, Negar Khanlou, Imna Cobos, Xinhai Robert Zhang, Neda Zarrin-Khameh, Harry V. Vinters, **Xiang 'Anthony' Chen**, Mohammad Haeri. Enhancing Mitosis Count Assessment in Meningiomas with Computational Digital Pathology. Acta Neuropathologica Communications. 12, 7 (2024).
2024	GI	Chia-Ming Chang, Yi Tang, Xi Yang, **Xiang 'Anthony' Chen**, Takeo Igarashi, 2024. Speed Labeling: Non-stop Scrolling for Fast Image Labeling. The 50th International Conference on Graphics Interface and Human-Computer Interaction (Gl 2024), Halifax, Nova Scotia, Canada, 3-6 June 2024.
2024	alt.chi	**Xiang 'Anthony' Chen**. HCI Papers Cite HCI Papers, Increasingly So. In Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems.
2024	ICHI	Hongyan Gu, Zihan Yan, Ayesha Alvi, Brandon Day, Chunxu Yang, Zida Wu, Shino Magaki, Mohammad Haeri, **Xiang 'Anthony' Chen**. Supporting Mitosis Detection AI Training with Inter-Observer Eye-Gaze Consistencies. In 2024 IEEE 12th International Conference on Healthcare Informatics.
2024	MEDIA	Marc Aubreville, Nikolas Stathonikos, Taryn A. Donovan, Robert Klopfleisch, Jonas Ammeling, Jonathan Ganz, Frauke Wilm, Mitko Veta, Samir Jabari, Markus Eckstein, Jonas Annuscheit, Christian Krumnow, Engin Bozaba, Sercan Çayır, Hongyan Gu, **Xiang 'Anthony' Chen**, Mostafa Jahanifar, Adam Shephard, Satoshi Kondo, Satoshi Kasai, Sujatha Kotte, V.G. Saipradeep, Maxime W. Lafarge, Viktor H. Koelzer, Ziyue Wang, Yongbing Zhang, Sen Yang, Xiyue Wang, Katharina Breininger, Christof A. Bertram. Domain generalization across tumor types, laboratories, and species—Insights from the 2022 edition of the Mitosis Domain Generalization Challenge. Medical Image Analysis, 94, 103155.
2024	IJHCS	Hongyan Gu, Chunxu Yang, Shino Magaki, Neda Zarrin-Khameh, Nelli S. Lakis, Inma Cobos, Negar Khanlou, Xinhai R. Zhang, Jasmeet Assi, Joshua T. Byers, Ameer Hamza, Karam Han, Anders Meyer, Hilda Mirbaha, Carrie A. Mohila, Todd M. Stevens, Sara L. Stone, Wenzhong Yan, Mohammad Haeri, **Xiang 'Anthony' Chen**. Majority voting of doctors improves appropriateness of AI reliance in pathology. International Journal of Human-Computer Studies, p.103315.
2023	UIST	Zihan Yan, Chunxu Yang, Qihao Liang, Pattie Maes, **Xiang 'Anthony' Chen**. XCreation: A Graph-based Crossmodal Generative Creativity Support Tool. Proceedings of the 36th Annual ACM Symposium on User Interface Software and Technology, 2023.
2023	TOCHI	**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

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.	
2023	Mobile-HCI	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. Proceedings of the ACM on Human-Computer Interaction, Volume 7, Issue MHCI. Article No.: 215, pp 1–25.	
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. Graphics Interface 2023.	
2023	CHI	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**	
2023	CHI	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.	
2023	CHI	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.	
2023	CHI	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.	
2023	CHI	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.	
2023	TOCHI	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.	
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. **Best Paper Award**	

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	
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	
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.	
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. Proceedings of the CHI '22: CHI Conference on Human Factors in Computing Systems, New Orleans, LA, USA, 29 April 2022, 2022.	
2022	CHI	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.	
2022	CHI	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.	
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.	
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.	
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.	
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	

2021	CHI	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.	
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.	
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.	
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 Functionalities. Proceedings of the UIST '20: The 33rd Annual ACM Symposium on User Interface Software and Technology, 2020.	
2020	CHI	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**	
2020	CHI	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.	
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	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.	
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.	
2018	CHI	Jun Gong, Zheer Xu, Qifan Guo, Teddy Seyed, **Xiang 'Anthony' Chen**, Xiaojun Bi, Xing-Dong Yang. WristText: 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**	
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.	

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.	
2018	CHI	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.	
2017	TOCHI	**Xiang 'Anthony' Chen**, Yang Li. Improv: An Input Framework for Improvising Cross-Device Interaction by Demonstration. ACM Trans. Comput. Hum. Interact., 2017	
2017	CHI	Anhong Guo, Jeeeun Kim, **Xiang 'Anthony' Chen**, Tom Yeh, Scott E. Hudson, Jennifer 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.	
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.	
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.	
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.	
2016	CHI	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.	
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.	

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.
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.
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.
2014	UIST	Ken Hinckley, Michel Pahud, Hrvoje Benko, Pourang Irani, François Guimbretière, Marcel Gavriliu, **Xiang 'Anthony' Chen**, Fabrice Matulic, William Buxton, Andrew Wilson. Sensing techniques for tablet+stylus interaction. Proceedings of the 27th Annual ACM Symposium on User Interface Software and Technology, 2014. **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 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-HCI	**Xiang 'Anthony' Chen**, Julia Schwarz, Chris Harrison, Jennifer Mankoff, Scott E. 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. Duet: exploring joint interactions on a smart phone and a smart watch. Proceedings of the CHI Conference on Human Factors in Computing Systems, 2014. **Best Paper Award**
2013	GI	Ken Hinckley, **Xiang 'Anthony' Chen**, Hrvoje Benko. Motion and context sensing techniques for pen computing. Proceedings of the Graphics Interface 2013, 2013.
2013	Visual Computer	Bin Pan, Yong Zhao, Xiaoming Guo, **Xiang 'Anthony' Chen**, Wei Chen, Qunsheng Peng. Perception-motivated visualization for 3D city scenes. The Visual Computer. 29.4 (2013): 277-286.
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-HCI	Sebastian Boring, David Ledo, **Xiang 'Anthony' Chen**, Nicolai Marquardt, Anthony 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 'Anthony' 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
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 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	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.

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

2025	CHI	Xingyu Bruce Liu, Haijun Xia, **Xiang 'Anthony' Chen**. Interacting with Thoughtful AI. In CHI 2025 Workshop on Tools for Thought: Research and Design for Understanding, Protecting, and Augmenting Human Cognition with Generative AI.
2024	CHI	Youngseung Jeon, Matthew K. Hong, Yan-Ying Chen, Kalani Murakami, Jonathan Q. Li, **Xiang 'Anthony' Chen**, and Matthew Klenk. Weaving ML with Human Aesthetic Assessments to Augment Design Space Exploration: An Automotive Wheel Design Case Study. In Extended Abstracts of the CHI Conference on Human Factors in Computing Systems.
2024	IUI	Chunxu Yang, Mohammad Haeri, Shino Magaki, Neda Zarrin-Khameh, Hongyan Gu, and **Xiang 'Anthony' Chen**. A Human-AI Collaborative System to Support Mitosis Assessment in Pathology. In Companion Proceedings of the 29th International Conference on Intelligent User Interfaces.
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.
2016	TEI	**Xiang 'Anthony' Chen**. Making Fabrication Real. Proceedings of the 29th Annual Symposium on User Interface Software and Technology, 2016.
2015	CHI	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

2025	**Xiang 'Anthony' Chen**, Hongyan Gu, Mohammad Haeri, Shino Magaki. Systems and Methods for Mitosis Detection and Quantification Using Digital Pathology. U.S. Patent Application PCT/US2025/013235, filed January 27, 2025.

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 April 5, 2022.

2019 Yang Li, and **Xiang 'Anthony' Chen**. Cross-device interaction through user-demonstrated gestures. U.S. Patent 10,234,953, issued March 19, 2019.

2018 Techniques For Interacting With Wearable Devices. Tovi Grossman, **Xiang 'Anthony' Chen**, George Fitzmaurice. U.S. Patent 10,082,953, issued September 25, 2018.

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 'Anthony' Chen**, and Kenneth Paul Hinckley. Motion and context sharing for pen-based computing inputs. U.S. Patent 9,201,520, issued December 1, 2015.

Funding

2024-2025	$75,000	Amazon Science Hub: Human-Centered Design of AI Systems to Support Drug Discovery **Xiang 'Anthony' Chen** (PI), Eunice Jun (Co-PI), Varghese John (Co-PI)
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	$50,000	Adobe 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)
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)

Press

Research Conducted or Led by Me

2021	Let's Redesign the Laptop for a Work-From-Home Era Wall Street Journal
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 Collaborated 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) PC World, Engadget, Gizmodo, etc.

Talks

2025	Rethinking HCI's Grand Challenges in the Era of Generative AI University of Cambridge (hosted by Per Ola Kristensson)
2024	Building Human-Centered AI Systems Stanford HCI Seminar (hosted by Michael Bernstein)

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 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
ECE Department, UCLA

2019-Now ECE M119 Fundamental of Networked Embedded Systems
ECE Department, UCLA

2018-Now ECE 209AS Human Factors in Artificial Intelligence
ECE Department, UCLA

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-now Youngseung Jeon (UCLA ECE)

2020-now Xingyu Liu (UCLA ECE)

2019-2024 Ruolin Wang (UCLA ECE)

2019-2024 Noyan Evirgen (UCLA ECE)

2018-2025 Hongyan Gu (UCLA ECE)

2018-2024 Jiahao Li (UCLA MAE)

Master Students Mentored

2016-Now Ziwen Li (UCLA ECE)
Christopher Hwang (UCLA ECE)
Wayne Zhang (UCLA ECE)
Roy Jara (UCLA ECE)
Yifan Xu (UCLA ECE)
Yao Xie (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)

Service

Ph.D. Thesis Committee

2020-Now Katelyn Morrison (CMU HCII)
Zhaoliang Zheng (UCLA ECE)
Kunlin Cai (UCLA ECE)
Kia Karbasi (UCLA ECE)
Julian De Gortari Briseno (UCLA ECE)
Wenzhuo Yu (UCLA ECE)
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 Christina Minyoung Lee (UCLA ECE)
William Jinglin Huang (UCLA ECE)
Ziwen Li (UCLA ECE)
Chunxu Yang (UCLA ECE)
Haolin Xiong (UCLA ECE)
Xiaoying Yang (UCLA ECE)
Matthew Waliman (UCLA ECE)
Rikako Hatoya (UCLA ECE)
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

2024	Gesture Lecturer for the UCLA Summer Institute CS97 Generative AI
2020	Judge for International Science and Engineering Fair (for high school students)

Review Panel

2023	Andy Hill CARE Fund
2021-2024	National Science Foundation

Editorial Board

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

Program Committee

2026	CHI	Computational Interaction Subcommittee Chair for ACM CHI Conference on Human Factors in Computing Systems
2021-2022	CSCW	ACM Conference on Computer-Supported Cooperative Work and Social Computing
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, 2025
UIST 2015-2016
Ubicomp 2016
CHI PLAY 2014