Qian Yang

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EMPLOYMENT	Cornell University , Assistant Professor Computing and Information Science	Aug. 2020 –
	 Google Brain, Research Intern People + AI Research (PAIR) Initiative, Cambridge, MA Mentors: Michael Terry and Carrie Cai Designed a computer vision application for cancer diagnosis 	May. 2019 – Aug. 2019
	Microsoft Research , Research Intern Knowledge Technologies and Intelligent Experience Group, Redmond,	May. 2018 – Aug. 2018 WA
	Microsoft Research, Research Intern Machine Teaching Group, Redmond, WA	May. 2017 – Aug. 2017
	Google , UX Research Intern Android Auto, Mountain View, CA	May. 2016 – Aug. 2016
	SAIC Innovation Center , Advanced Design Strategist Shanghai, China	Mar. 2013 – Jul. 2014
	Design Trend Institute (consultancy), Research Lead Shanghai, China	Aug. 2007 – Aug. 2012
EDUCATION	 Ph.D. in Human-Computer Interaction Carnegie Mellon University School of Computer Science Thesis: Profiling AI as a Material for User Experience Design Advisors: John Zimmerman, Aaron Steinfeld. Other thesis committee members: Carolyn Rosé, Saleema Amershi. 	Sep. 2014 – <i>exp</i> . Jun. 2020
	M.S. in Human-Computer Interaction (Computer science track) Carnegie Mellon University School of Computer Science	Sep. 2014 – Sep. 2016
	M.Des. in Design Shanghai Jiao Tong University School of Media and Design	Sep. 2010 – Mar. 2013
	 B.Eng. in Industrial Design B.BA in Business Administration Shanghai Jiao Tong University School of Media and Design; Antai College of Economics and Manage 	Sep. 2006 – Jun. 2010 ment
NOTABLE AWARDS	ACM CHI'20 Best Paper Honorable Mention ACM CHI'19 Best Paper ACM CHI'19 Best Paper Honorable Mention ACM DIS'18 Best Paper Honorable Mention ACM CHI'16 Best Paper Honorable Mention	2020 2019 2019 2018 2016
	Microsoft Research Dissertation Grant Microsoft Research	2019
	CMLH Fellowship in Digital Health The Pittsburgh Health Data Alliance, The Center for Machine Learning and Health	2018
	Innovation by Design Award FastCompany	2018

AAAI Student Scholarship Award The Association for the Advancement of Artificial Intelligence (AAAI)	2017 and 2018
ProSEED/Crosswalk Seed Grant Carnegie Mellon University	2017
SensiHub Student Fellowship SensiHub, Palo Alto, CA, USA	2017
National Merit Scholarship Winner [top 0.1%] The Ministry of Education of P.R.China	2009
Shanghai Jiao Tong University Fellowship [5-time winner, top 0.4%]	2006 – 2013
Chery Fellowship [top 0.1%]	2011
Graduate of the Year [2-time winner, top 0.1%] The Government of Shanghai, China	2013 & 2010
Student Leadership Award [2-time winner, top 0.2%]	2008 – 2009
Outstanding Student Award [2-time winner, top 0.1%]	2007 – 2009
Los Angles Auto Show Design Challenge Winner Wins as a member of SAIC Motor Design Studio; Press: Wired, The Guardian, Fast Company, autoweek, etc.;	2013
Gold Award of SAP Interaction Design Workshop	2011
Volkswagen Future Design Competition, Creativity Award	2011

PUBLICATIONS Peer-Reviewed Conference Publications

- 1) O. Romero, A. Haig, L. Kirabo, **Q. Yang**, J. Zimmerman, A. Tomasic, A. Steinfeld, "A Long-Term Evaluation of Adaptive Interface Design for Mobile Transit Information," to appear in *Proceedings of the 22nd International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI'20).*
- 2) **Q. Yang**, A. Steinfeld, C. Rosé, J. Zimmerman, "Re-examining Whether, Why, and How the UX of AI Is Uniquely Difficult to Design," in *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (CHI '20)*. [CHI Best Paper Honorable Mention]
- 3) **Q. Yang**, A. Steinfeld, J. Zimmerman, "Unremarkable AI: Fitting Intelligent Decision Support into Critical, Clinical Decision-Making Processes," in *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19)*, Glasgow, UK, May. 2019. [CHI Best Paper]
- 4) **Q. Yang**, J. Cranshaw, S. Amershi, S. Iqal, J. Teevan, "Sketching NLP: A Case Study of Exploring the Right Things To Design with Language Intelligence," in *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19)*, Glasgow, UK, May. 2019. [CHI Best Paper Honorable Mention]
- D. Wang, Q. Yang, A. Abdul, B. Lim, "Designing Theory-Driven User-Centric Explainable AI," in Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19), Glasgow, UK, May. 2019.
- 6) **Q. Yang**, "Effectively Situating AI in Critical Clinical Practice: The Case of Artificial Heart Implant Candidate Selection," in *The Frontier of AI-Assisted Care (FAC) Scientific Symposium with NATURE Medicine*, Stanford, CA, Sep. 2019.
- 7) **Q. Yang**, A. Scuito, J. Zimmerman, J. Forlizzi, A. Steinfeld, "Investigating How Experienced UX Designers Effectively Work with Machine Learning" in *Proceedings of the 2018 Designing Interactive Systems Conference (DIS '18)*, Hong Kong, China, Jun. 2018. [pdf] [DIS Best Paper Honorable Mention]

- 8) **Q. Yang**, J. Suh, N. Chen, G. Ramos, "Grounding Interactive Machine Learning Tool Design in How Non-Experts Actually Build Models," in *Proceedings of the 2018 Designing Interactive Systems Conference (DIS '18)*, Hong Kong, China, Jun. 2018. [pdf]
- 9) **Q. Yang**, N. Banovic, J. Zimmerman, "Mapping Machine Learning Advances from HCI Research to Reveal Starting Places for Design Research," in *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (CHI '18)*, Montréal, Canada, Apr. 2018. [pdf]
- 10) C. Basu, **Q. Yang**, D. Hungerman, A. Dragan, M. Singhal, "Do You Want Your Autonomous Car to Drive Like You?," in *Proceedings of the 2017 ACM/IEEE International Conference on Human-Robot Interaction (HRI '17)*, Vienna, Austria, Mar. 2017. [pdf]
- 11) **Q. Yang**, J. Zimmerman, A. Steinfeld, L. Carey, J. Antaki, "Investigating the Heart Pump Implant Decision Process: Opportunities for Decision Support Tools to Help," in *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI '16)*, San Jose, CA, USA, May. 2016. [pdf] [CHI Best Paper Honorable mention]
- 12) **Q. Yang**, M. Kanwar, J. Zimmerman, J. Antaki, L. Carey, "VAD Patient Selection: What Happens In Real-World Practice?" in *Abstracts of The International Society for Heart and Lung Transplantation (ISHLT) Conference 2016*, Washington D.C., USA, Apr. 2016.
- 13) **Q. Yang**, A. Steinfeld, A. Tomasic, J. Zimmerman, "Planning Adaptive Mobile Experiences When Wireframing" in *Proceedings of the 2016 Designing Interactive Systems Conference (DIS '16)*, Brisbane, Australia, Jan. 2016. [pdf]
- 14) **Q. Yang**, J. Zimmerman, and A. Steinfeld, "Review of Medical Decision Support Tools: Emerging Opportunity for Interaction Design," in *Proceedings of IASDR '15*, Brisbane, Australia, Nov. 2015.

Journal Publications and Book Chapters

- 15) J. Forlizzi, J. Zimmerman, **Q. Yang**, C. Oh, and N. Yildirim "Designing AI Products and Services: Benefits, Challenges, and Ideas for Improving Design Practice" To appear in the *Human-Centered Machine Learning* book.
- 16) A. Steinfeld, L. Bloomfield, S. Amick, Y. Huang, Q. Yang, W. Odom, J. Zimmerman, "Localized Mobile Information Increases Access to Transit," to appear in *Journal of Urban Technology* (*CJUT*), Mar. 2019. [pdf]
- 17) **Q. Yang**, M. Kanwar, J. Antaki, L. Carey, J. Zimmerman "Patient Selection for Ventricular Assist Devices: What Happens In Real Practice?" in *The American Heart Association Fellows Research Day*, Pittsburgh, PA, USA Jan. 2016.
- 18) **Q. Yang**, J. Fu, "Modeling Automobile Facial Aesthetics Based on Human Face Aesthetic Models," *Design Journal*, vol. 2, pp. 18–20, Feb. 2013.

Workshop and Symposium Papers

- 19) **Q. Yang**, "Two Case Studies of Experience Prototyping Machine Learning Systems in the Wild," in *Joint Proceedings of CHI '19 Workshop on Emerging Perspectives in Human-Centered Machine Learning*, Glasgow, UK, May. 2019.
- 20) B. Lim, **Q. Yang**, A. Abdul, D. Wang, "Why these Explanations? Selecting Intelligibility Types for Explanation Goals," in *Joint Proceedings of the ACM IUI 2019 Workshops*, Los Angeles, CA, USA, Mar. 2019. [pdf]
- 21) **Q. Yang**, "Machine Learning as a UX Design Material: How Can We Imagine Beyond Automation, Recommenders, and Reminders?" in *Proceedings of The AAAI 2018 Spring Symposium on Designing the User Experience of Artificial Intelligence*, Stanford, CA, USA, Mar. 2018. [pdf]

- 22) **Q. Yang**, "The Role of Design in Creating Machine-Learning-Enhanced User Experience," in the Proceedings of *The AAAI 2017 Spring Symposium on Designing the User Experience of Machine Learning Systems Technical Report SS-17-04*, Stanford, CA, USA, Mar. 2017. [pdf]
- 23) **Q. Yang**, "Bridging Machine Learning and Real World Complexities with Interaction Design," in *Joint Proceedings of CHI '16 Workshop on Human-centered Machine Learning*, San Jose, CA, USA, May. 2016. [pdf]

INVITED TALKS

Talk & Panel: AI, machine learning, and Clinical Decision Support

Sep. 2020

Hosted by the U.S. Department of Health and Human Services (HHS)

The Office of the National Coordinator for Health Information Technology (ONC)

Keynote: UX Design in the Era of Big-Driven Artificial Intelligence

Sep. 2020

Designing with Artificial Intelligence Conference 2020

Berlin, Germany

Hosted by Marc Engenhart and Sebastian Löwe

Making AI the New Electricity

Apr. 2020

Boston University, Computing and Data Sciences

Boston, MA, USA

Hosted by Professor Azer Bestavros

Understanding and Designing the User Perception of AI FATE

Apr. 2020

Microsoft Research, FATE (Fairness, Accountability, Transparency, and Ethics in AI) Group

New York, NY, USA

Making AI the New Electricity

Apr. 2020

University of Toronto, Department of Computer Science

Toronto, ON, Canada

Hosted by Professor Fanny Chevalier

Apr. 2020

Making AI the New Electricity University of Pennsylvania, Department of Computer and Information Science

Philadelphia, PA, USA;

Hosted by Professor Chris Callison-Burch.

Designing AI Products and Services (Virtual)

Mar. 2020

The South by Southwest (SXSW) 2020, Austin, TX, USA;

Making AI the New Electricity

Mar. 2020

Brown University, Department of Computer Science

Providence, RI, USA

Harnessing the Power of People for AI

Mar. 2020

University of Wisconsin-Madison, School of Computer Science

Madison, WI, USA;

Hosted by Professor Bilge Mutlu.

Making AI the New Electricity

Mar. 2020

Cornell University, Department of Information Science

Ithaca, NY, USA;

Hosted by Professor Dan Cosley.

Making AI the New Electricity

Mar. 2020

University of Washington, Department of Human Centered Design & Engineering (HCDE)

Seattle, WA, USA:

Hosted by Professor Sean Munson.

Making AI the New Electricity University of Illinois at Urbana-Champaign, School of Computer Science Urbana, IL, USA; Hosted by Professor Karrie Karahalios.	Feb. 2020 ce
Harnessing the Power of People for AI Johns Hopkins University, School of Computer Science Baltimore, MD, USA; Hosted by Professor Chien-Ming Huang.	Feb. 2020
Artificial Intelligence as a Material for User Experience Design The University of Massachusetts Amherst <i>Machine Learning and Friends</i> Seminar Series.	Jan. 2020
Providing Methods and Tools for Sketching and Prototyping Human-Al Microsoft Research PhD Summit, Redmond, WA, USA; Hosted by Meredith Ringel Morris and Gonzalo Ramos.	Interaction Oct. 2019
Unremarkable AI that Transforms Clinical Practice Google Health Research, London, UK; Hosted by Ali Connell and Megumi Morigami.	Aug. 2019
Product Innovation With Machine Intelligence FutureX Live: The Modified Market for the Modern Consumer, Pittsbur Hosted by Moxie Inc	Sep. 2018 rgh, PA, USA;
Invited Talk & Panel Chair : Artificial Intelligence and Design Educat IACHI'2018: AI and the Next Generation User Experience, Montreal, C Hosted by Prof. Zhiyong Fu.	
Seminar & Workshop : Design Machine-learning-mediated User Expersor Savannah College of Art and Design, Savannah, GA, USA. Hosted by Prof.Eunki Chung	rience Nov. 2016
Toward Machine-learning-friendly Automotive Interfaces SAIC Global HQ, Shanghai, China.	Aug. 2016
Keynote: Rethinking the Cognitive and Emotional Intelligence of Com International Embodied Interaction Design Seminar 2015, Beijing, Chir.	-
Young Women for STEM: Google Recognition Night Penn State New Kensington, PA, USA	Jul. 2015
Advanced Design Research in Practice Design Empowers Dreams Conference, Shanghai, China.	Jun. 2013
Understanding Chinese Trend-setters' Lifestyle and Personal Value <i>Insight Shanghai</i> Design Trend Conference 2012, Shanghai, China.	Sep. 2012
The Perception of Luxury in Confucius Culture and Its Trends <i>Insight Shanghai</i> Design Trend Conference 2011, Shanghai, China.	Sep. 2011
Applying Developmental Psychology to Product Design Research Changhong Electronics HQ, Mianyang, China.	Jul. 2011
Program Committee, ACM FAccT The ACM Conference on Fairness, Accountability, and Transparency	FAccT'21
Associate Chair, ACM CHI Papers & Late Break Work	CHI'20 and CHI'21
Associate Chair, ACM DIS Papers	DIS'19, DIS'20, and DIS'21

ACADEMIC SERVICES

		Program Committee , the Human-AI Interaction Workshop @ECAI'20 The 24th European Conference on Artificial Intelligence, Santiago de Compostela, Spain.	Aug. 2020
		International Program Chair, Graphics Interface conference (GI)	Since GI'20
		Invited Contributor, Google People+AI Guidebook	Apr. 2019
		Invited Contributor, Report <i>Data-Fueled Products</i> Invited by Forrester Research	Jul. 2019
		Reviewer Conferences: ACM CHI Papers, DIS Papers and Pictorials, UIST Papers, etc. Journals: The HCI Journal, International Journal of Design, International Journal of Medical Book proposals: MIT Press, etc.	Since 2014 Informatics, etc.
SERVICES DIVERSITY	&	Ph.D. Program Ombudspeople HCI Institute, Carnegie Mellon University	2019
		Ph.D. Program Student Representative for Faculty Body HCI Institute, Carnegie Mellon University	2015, 2018, 2019
		Mentor, Women@SCS Ph.D. Mentoring Event Series Carnegie Mellon University School of Computer Science	2016 - 2019
		Mentor, Undergraduate AI Mentoring Program Carnegie Mellon University, Pittsburgh, PA, USA	Fall 2018
		Speaker, Young Women for STEM Google Recognition Night Penn State New Kensington, PA, USA	Jul. 2015
PRESS (SELECTED)		Data Fueled Products: How To Thrive On The Design And Data Science Collision Keynote at Forrester CXSF forum, by Andrew Hogan	Aug. 2018
		We need unremarkable AI, Medtech4Health Sweden.	May. 2018
		Augmenting decisions and the impact of adversarial data, AI Talk.	May. 2018
		CMU Researchers Make Transformational AI Seem "Unremarkable", Science Dai	
		Emerging Experiences 2019, Prepare.AI 2019 Conference, Designing AI Systems with Qian Yang, The Women in Tech Show.	Apr. 2018 Jan. 2018
		An Ingenious Approach To Designing AI That Doctors Trust, Fast Company.	Jan. 2018
		Designers Aren't Prepared To Make AI – Here's How To Get Ready, Fast Company	
		LA Auto Show: Nature-Inspired Futuristic Concept Vehicles, The Guardian	Dec. 2013
		Outlandish Concept Cars Inspired by Nature, WIRED	Dec. 2013
		5 Crazy Personal Mobility Concepts—Inspired By Nature, Fast Company	Dec. 2013
		SAIC Wins LA Auto Show Design Challenge, Autoweek	Nov. 2013