

Zijian Ding (Jason)

PhD Student in HCI/ML and Social Computing | ding@umd.edu | jason-ding.com (Updated in May 2021)

EDUCATION	Ph.D in Information Studies & HCI , University of Maryland, College Park (UMD) 2021-2026 (Exp.)
	M.S in Electrical & Computer Eng , University of California, San Diego (UCSD) 2018-2020
	B.Eng in Electronic & Information Eng , The Hong Kong Polytechnic University (PolyU) 2014-2018
	Summer Visiting , Pembroke College, The University of Cambridge 2017
	Exchange , National University of Singapore (NUS) 2017
	Summer Visiting , The University of British Columbia (UBC) 2015

RESEARCH EXPERIENCE	Graduate Student Researcher (Lab Assistant II) , UCSD Design Lab Apr 2019–Present Supervised by Prof. Steven Dow and Dr. Stephen MacNeil <ul style="list-style-type: none">• Explore how to engage, empower and scaffold novice community members in the design process• Conduct a case study of Canvas which uses a discussion forum to crowdsource problems and solutions from its own end-users; analyze 1412 ideas and 18,335 associated comments shared on Canvas• Have developed 2 web-based interventions that leverage machine learning models and computation to help guide and scaffold design novices to work on creative tasks such as exploratory search• Resulted in 3 full papers accepted to CHI'21, CSCW'21 and C&C'21, and one CHIIR'21 short paper
	Visiting Researcher , Dept. of Computer Science and Engineering, HKUST Sep 2020–Present Supervised by Prof. Xiaojuan Ma <ul style="list-style-type: none">• Lead a research project developing an interface to embed backchannel into conversation and collect spoken language biomarkers for screening and monitoring neurocognitive disorders of the elderly• Collaborate with Prof. Helen Meng (CUHK) on a University Grants Committee (UGC) Theme-Based Research Scheme with funding HK\$50M (US\$6.45M) [Media appearance on IEEE Spectrum]• Collaborate with Prof. Pascale Fung, Prof. Bertram Shi and Prof. Qifeng Chen (all from HKUST) on an ITF-Platform project with funding HK\$2.94M (US\$380K)
	Undergraduate Student Researcher , PolyU & Boud University Sep 2017–Aug 2018 Supervised by Prof. Hung-Lin Chi and Dr. Ruidong Chang (now with the University of Adelaide) <ul style="list-style-type: none">• Work on 3 computer-aided civil engineering projects with 3 publications and co-led a successful 3D printing building project with US\$46,000 funds
	Undergraduate Capstone Project , PolyU Apr 2017–May 2018 Supervised by Prof. Francis C. M. Lau <ul style="list-style-type: none">• Build a CV-based wireless water-meter reading system (Best 50 Final Year Projects Award in HK)

PUBLICATIONS	Conference Papers <ol style="list-style-type: none">[1] S. MacNeil, Z. Ding, K. Quan, T. J. Parashos, Y. Sun, S. P. Dow. Framing Creative Work: Helping Novices Frame Better Problems through Interactive Scaffolding. In <i>Proceedings of the 2021&2022 Conferences on Creativity and Cognition (C&C'21&22)</i>, Online, 2021&2022.[2] S. MacNeil, Z. Ding, A. Boone, A. B. Grubbs, S. P. Dow. Finding Place in a Design Space: Challenges for Supporting Community Design Efforts at Scale. In <i>Proceedings of the 2021 Conference of Computer Supported Cooperative Work (CSCW'21)</i>, Online, 2021.[3] S. Palani, Z. Ding, A. Nguyen, A. Chuang, S. MacNeil, S. P. Dow. CoNotate: Suggesting Queries Based on Notes Promotes Knowledge Discovery. In <i>Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (CHI'21)</i>, Online, 2021.[4] S. Palani, Z. Ding, S. MacNeil, S. P. Dow. The "Active Search" Hypothesis: How Search Strategies Relate to Creative Learning. In <i>Proceedings of the 2021 Conference on Human Information Interaction and Retrieval (CHIIR'21)</i>, Online, 2021.[5] R. Chang, Q. Wang, Z. Ding. Revolutionizing Urban Energy Planning: A Roadmap Towards City-level Energy Modelling in Australia. In <i>Proceedings of the International Conference on Con-</i>
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struction Project Management and Construction Engineering (iCCPMCE'18), Sydney, Australia. **(Best Paper 🏆)**.

- [6] Q. Wang, S. Zhang, D. Wei, **Z. Ding**. Additive Manufacturing (AM): A Revolutionized Power for Construction Industrialization. In *Proceedings of the 2018 International Conference on Construction and Real Estate Management (ICCREM'18)*, Charleston, USA. **(Best Paper 🏆)**

Journals

- [1] S. Chang, Q. Wang, H. Hu, **Z. Ding**, H. Guo. An NNwC MPPT-Based Energy Supply Solution for Sensor Nodes in Buildings. *Energies*, 12(1), 1-20.
- [2] R. Chang, Q. Wang, **Z. Ding**. How is the Energy Performance of Buildings Assessed in Australia?- A Comparison between four Evaluation Systems. *International Journal of Structural and Civil Engineering Research*, 8(2), 133-137.

AWARDS (US\$88,100)	UMD iSchool Dean's Fellowship , US\$10,000	2021
	UCSD ECE SRIP Fellowship , US\$5,000	2019
	Winner of the UCSD Design Lab Mobility Hub Designathon , US\$1,000	2019
	Best 40 FYP+ Award , US\$2,500	2019
	Finalist of UC Berkeley Big Ideas Proposal Contest , 16% acceptance rate	2019
	PolyU Entry Scholarship (Academic Excellence) , US\$61,500	2014–2018
	Best Paper Award , Intl. Conference on Construction and Real Estate Management	2018
	Best Paper Award , Intl. Conference on Construction Project Management & Construction Eng.	2018
	Best 50 Final Year Projects Award , US\$2,500	2018
	Bronze Award (IT Services) , 4th China College Students' "Internet+" Innov. & Entr. Competition	2018
	Bronze Award (Mfg) , 4th China College Students' "Internet+" Innov. & Entr. Competition	2018
	Hong Kong-Tsingtao Association Scholarship , US\$1,300	2018
	Best GPA Award , Dept. of Electronic and Information Engineering, PolyU	2017
	Twice on Dean Honors List , Faculty of Engineering, PolyU	2015–2017
	Wong Tit-shing Student Exchange Scholarship , US\$2,000	2017
PolyU Student Exchange Scholarship , US\$2,300	2017	
FUNDS (US\$67,000)	Don Norman Design Fund , US\$890	2019
	PolyU Student Entrepreneurial Proof-of-Concept Funding Scheme , US\$4,000	2019
	PolyU International Competition & Conference Participation Scheme , US\$5,910	2018
	Mingxi Youth Fund , US\$33,000	2018
	PolyU Global Student Project Fund , US\$13,000	2018
	PolyU Oxbridge (Oxford & Cambridge) Abroad Subsidy , US\$6,400	2017
	PolyU Offshore WIE Sponsorship , US\$3,800	2016
TALKS & PRESENTATIONS	Presentation at CHI 2021 , Online	12 May 2021
	CoNotate: Suggesting Queries Based on Notes Promotes Knowledge Discovery	
	Poster at CHIIR 2021 , Online	16-18 Mar 2021
	The "Active Search" Hypothesis: How Search Strategies Relate to Creative Learning	
	Poster at World Innovation & Entrepreneurship EXPO (WIEE) , Tongji University	19 May 2018
Bright Building: Additive Construction for Post-Disaster Redevelopment		
Poster at Forum "From Disaster Management to Disaster Risk Reduction" , PolyU	7 May 2018	
Bright Building: Additive Construction for Post-Disaster Redevelopment		

	Talk at Luncheon Research Seminar , Dept of Building and Real Estate (BRE), PolyU Bright Building: Additive Construction for Post-Disaster Redevelopment	8 Mar 2018
COURSE PROJECTS	Interaction Design (A+) , Design and develop a budget web application with JavaScript. Machine Learning for Image Processing (A) , Implement YOLOv3 with PyTorch .	Winter 2019 Spring 2019
PROFESSIONAL EXPERIENCE	Promotion Manager , UCSD Design Lab Design for San Diego (D4SD) Challenge Database Engineer Intern , Moscow International Higher Business School (MIRBIS)	Jan–Sep 2020 Jun–Aug 2016
SKILLS	Programming Languages Python, Java, C/C++, R, Matlab, \LaTeX Fullstack JavaScript, React.js, Vue.js, Redux, Flask, Node.js, Docker, MySQL, Firebase, HTML, CSS Machine Learning & NLP pyTorch, TensorFlow, scikit-learn, NLTK, pandas, spaCy, Gensim Visualization D3.js, ggplot2, Matplotlib, Seaborn, Plotly UI & Design Figma, Photoshop, InDesign, AutoCad, Final Cut Pro, Paper Prototyping Qualitative Research Methods Interview, Usability Test, Qualitative Coding, Affinity Diagram Hardware Microcontroller Programming (Arduino, STM32), PCB design, 3D Printing Languages English (TOEFL:108, R:29 L:27 S:24 W:28), Chinese (Mandarin/Cantonese)	
MENTORING	Kexin Quan (B.S.) Major in Cognitive Science (ML & Neural Computation), UCSD	Apr 2020–Present
VOLUNTEER SERVICE	Panelist , Professional Development Speaker Session, Hong Kong-Tsingtao Association IT Advisor (prev. IT Secretary) , PolyU Living & Learning Communities–EHKC VP (prev. External Secretary) , PolyU Living & Learning Communities–PDC Conference Host , Asian Venture Philanthropy Network (AVPN) Conference 2016	10 Apr 2021 Dec 2015–Dec 2017 Sep 2015–Apr 2017 May 2016
MEMBERSHIPS	ACM Student Member; Pembroke College Circle (Cambridge)	
MEDIA APPEARANCES	Interview "How to Make the Most of Your University Experience?" 43,600+ views on YouTube Departmental Newsletter "Best Paper in 2018 ICCREM" (on page 1) Alumni Sharing "PolyU Helps Me Establish 3 Pillars of Research Exploration" (in Chinese).	
REFERENCES	Dr. Steven Dow , Associate Professor, University of California, San Diego (UCSD) Dr. Xiaojuan Ma , Assistant Professor, Hong Kong University of Science and Technology (HKUST) Dr. Helen Meng , Patrick Huen Wing Ming Professor, The Chinese University of Hong Kong (CUHK)	