FENG FENG, PHD

(+45)60896618 ♦ ffeng0531@gmail.com Post-doctoral researcher in HCI, Aarhus University Finlandsgade 10, Aarhus 8200

RESEARCH AREAS

Human-Computer Interaction Multisensory perception and interaction, Multisensory technology design Affective interaction and aesthetics, Emotion regulation Design research, Design theory and toolkits Enactivism, Embodied cognition

WORK EXPERIENCE

Interaction Design, Aarhus University, Denmark

March 2025 - now

Postdoc researcher

· I'm working on developing multisensory interaction and interfaces for emotion regulation and stress coping. Funded by Carlberg Foundation.

Digital Design Department, IT University of Copenhagen, Denmark & School of Computer Science, Aalto University, Finland February 2023 - January 2025 Postdoc researcher

· I'm working on developing design theories and translational toolkits for affective interaction technology. Funded by European Union (ERC, THEORYCRAFT, 101043198).

School of Computer Science, Aalto University, Finland

April 2022 - January 2023

Postdoc researcher

· I was working on developing a translational framework for the design of affective interaction technology. Funded by European Union (ERC, THEORYCRAFT, 101043198).

University of Eastern Finland - Kuopio University Hospital, Finland De

December 2020 -

January 2022

 $Postdoc\ researcher$

· My work with surgeons focused on understanding the role of tacit motor-skill in surgical training and developing training technology using the participatory design method.

Funded by Academy of Finland (Grant number: 334658).

BIG (Bristol Interaction Group) Lab, University of Bristol, UK August 2019 - May 2020 Research Associate, Visiting Researcher currently

· I worked on developing shape-change technologies to capture and enrich multi-sensory experience and emotional values.

Funded by EPSRC Fellowship Grant. (Grant number: EP/N00616X/2).

Demand logic limited, London

April 2019 - July 2019

Consultancy

· I worked on the visualisation of power consumption data, to help both consumers and providers identify peak shifting (shifts in peak electricity consumption) to achieve carbon emission reduction.

Queen Mary University of London, UK

Jan 2015 - June 2019

Teaching assistant

· As a teaching assistant, I prepared teaching materials, provided guidance and advice to students on projects, and made marking criteria for examinations.

EDUCATION

Queen Mary University of London (University of London, UK)

November 2019

PhD in Human-Computer Interaction, Cognitive Science Research Group.

Cognitive Science Research Group, Department of Electronic Engineering and Computer Science (Russell group University)

Hunan University (Changsha, CN)

June 2014

MA in Interaction Design

School of Design

(The leading design institute in China in Industrial Design and Interaction Design)

Shandong University (Jinan, CN)

June 2011

Bachelor of Engineering

School of Mechanical Engineering

(Double-First Class University, Rank A)

PUBLICATIONS

Journals

[J1] Measurement of pressure discomfort threshold in auricular concha for in-ear wearables design Xinyi Yuan, Zijian Wang, **Feng Feng**, Yuanyuan Bu, Zhijun Fan, Heshan Liu, Puhong Li, Luan Zhang, Xiao Li, Zhiwei Hu (2023)

DOI: 10.1016/j.apergo.2023.104078

[J2] Exploring crossmodal perceptual enhancement and integration in a sequence-reproducing task with cognitive priming

Feng Feng, Puhong Li, Tony Stockman (2020)

DOI: 10.1007/s12193-020-00326-y

[J3] Measuring and understanding touch and tactile sensibility in surgical skill training **Feng Feng**, Ahmed Husseinb, Xiao-Bin Zhuang, Roman Bednarik, Antti Huotarinen Submitted for Applied Ergonomics, March 2025, Under review

Conferences (Conference papers in Computer Science are considered the same as Journal papers)

[C1] Thermal Cards: From Classical Chinese Poetry to Designerly Lenses on Thermal-Affective Technology. In Proceedings of the Nineteenth International Conference on Tangible, Embedded, and Embodied Interaction (pp. 1-13).

DOI: 10.1145/3689050.3704419

Feng Feng, Elisa Mekler

[C2] (Accepted for CHI 2025) Autonomous Regulation of Social Media Use: Implications for Self-control, Well-Being, and UX

Dan Bennett, Feng Feng, Elisa Mekler

[C3] (Accepted for CSCW 2025) Read the Room As We Talk: How People Coordinate Multiple Communication Channels

Rongjun Ma, Feng Feng, Janne Lindqvist

[C4] Smiles Summon the Warmth of Spring: A Design Framework for Affective-Thermal Interaction based in Chinese Cí Poetry. In Proceedings of the 2024 ACM Designing Interactive Systems Conference (pp. 2802-2819).

DOI: 10.1145/3643834.3661620

Feng Feng, Dan Bennett, Elisa Mekler

[C5] It's Touching: Understanding Touch-Affect Association in Shape-Change with Kinematic Features. In Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems

DOI: 10.1145/3491102.3502003

Feng, F., & Bennett, D., & Fan, Z, & Metatla, O. (2022, November).

[C6] Feeling Colours: Crossmodal Correspondences Between Tangible 3D Objects, Colours and Emotions. In Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems

DOI: 10.1145/3411764.3445373

Lin, A., Scheller, M., Feng, F., Proulx, M. J., & Metatla, O. (2021, May).

[C7] Augmented Visuotactile Feedback Support Sensorimotor Synchronization Skill for Rehabilitation. In Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems (p. LBW2120). ACM.

DOI: 10.1145/3290607.3312812

Feng, F., & Stockman, T. (2019, April).

[C8]An investigation of dynamic crossmodal instantiation in TUIs. In Proceedings of the 19th ACM International Conference on Multimodal Interaction (pp. 82-90). ACM.

DOI: 10.1145/3136755.3136782

Feng, F., & Stockman, T.

[C9] An investigation into the comprehension of map information presented in audio. In Proceedings of the XVI International Conference on Human Computer Interaction (p. 29). ACM.

DOI: 10.1145/2829875.2829896

Feng, F., Stockman, T., Bryan-Kinns, N., & Al-Thani, D.

International Workshop Organisation and Collaboration

[W1](I am the main organiser. Names are listed alphabetically.) Integration of Human Factors in Surgery: interdisciplinary collaboration in design, development, and evaluation of surgical technologies In **2022 CHI** Conference on Human Factors in Computing Systems

DOI: 10.1145/3491101.3503709

Bednarik, R., Blandford, A., **Feng, F.**, Huotarinen, A., Iso-Mustajärvi, M., Lee, A., Nicolosi, F., Opie, J., Yoo, S. and Zheng, B.

[W2] (I am the Co-organiser) Emergent Interaction: Complexity, Dynamics, and Enaction in HCI. In **2021 CHI** Conference on Human Factors in Computing Systems

DOI: 10.1145/3411763.3441321

Bennett, D., Dix, A., Eslambolchilar, P., Feng, F., Froese, T., Kostakos, V., van Berkel, N.

Pipeline in 2025

[P1] For **TOCHI**: Extending the Design Space for Interactive Thermal Support in Emotional Regulation — an Autobiographical Design

Feng Feng, Elisa Mekler

[P2] For **CHI2026**: Investigating multisensory features on shape-changing breathing technology for weight-training

QiDong Wang, Feng Feng, Zhijun Fan, Puhong Li

[P3] For **DIS 2026**: From "Bouba-Kiki" to A Design Space: Affective Associations with Shape Features Can Inform Affective Multisensory Interaction

Feng Feng, Dan Bennett, Oussama Metatla

GRANT WRITING EXPERIENCE

Project: Inclusive Cross-sensory Social Play: Towards a new paradigm of assistive technology for early development of blind and visually impaired children.

My role: I facilitated Dr. Oussama Metatla (PI) on material preparation, including proposing shape-changing interfaces, technical solutions, and also contributing to 3D modeling.

Result: Finished. Awarded by EPSRC 2023-2028.

Project: 2024 Melbourne - Birmingham Call for Jointly Awarded/Dual PhD Projects

My role: I was one of the project collaborators and contributed to the ideation and writing of the grant with Dr. Hyunyong Kim and Dr. Wafa Johal.

B. W. E. J. J. N. J. J. J.

Result: Finished. Not awarded.

INVITED TALKS

Multisensory, Emotion and Design Theory

Interacrtion Design seminar, Aarhus 2025

Multisensory, Emotion and Design Theory

Danish HCI day, Copenhagen 2024

Design Framework for Affective-Thermal Interaction based in Chinese Cí Poetry Computer science seminar, University of Birmingham 2024

Theory Use in CHI Scaffolding Theories and Methods for HCI Research and Practice Human and Technology Group, TU Chemnitz 2022

Touch, Affects, and Shape-change Robots: Understanding Touch-affect Association in Shape-change with Kinematic Features

School of Computer Science and Informatics, Cardiff University 2022

Translating Crossmodal Correspondences for Multisensory Interaction Design Game Group, Tempere University 2021

Understanding Crossmodal Correspondences and the Implications for Rehabilitation Technology Design

Department of Mechanical Engineering, Shandong University 2019

TEACHING & SUPERVISION

Co-supervision

(Day-to-day supervision, bi-week meetings, guide paper writing.)

One PhD student 2022-2024 with Dr Janne Lindqvist at Aalto University, Finland.

Four MSc students 2019-2024 with Dr Oussama Metatla, Dr Zhijun Fan at Bristol University, UK, Shandong University, China.

Research interns and final-year project of undergraduate 2019 - 2022 with Dr Tony Stockman at Queen Mary University of London, UK.

Undergraduate course

(Prepare teaching materials, deliver lectures, Q&A, examination and marking)

Affective interaction design for healthcare technology at Qilu University of Technology, China (2024 spring, Guest lecture).

ECS 612U Interaction design at Queen Mary University of London, UK (2017/18, 2018/19).

ECS 639U Web programming at Queen Mary University of London (2017/18)

ECS 511U Creating interactive objects at Queen Mary University of London (2017/18).

ECS 722U Internet-of-things technology at Queen Mary University of London (2016/17).

ECS 522U/ECS 744P Graphical user interfaces at Queen Mary University of London (2015/16).

Graduate course

(Design course content, deliver lectures.)

Introduction of research in Human-computer interaction at University of Birmingham, UK (2024 Autumn, Guest lecture).

ECS 740P Database system at Queen Mary University of London, UK (2017/18).

ACADEMIC DUTIES AND CONFERENCE ORGANISATION

Program Committee as an Associate Chair for Top-ranked International Conferences:

CHI - The ACM CHI conference on Human Factors in Computing Systems

DIS - ACM Designing Interactive Systems

CSCW - ACM SIGCHI Conference on Computer-Supported Cooperative Work & Social Computing

ICAD - The International Community for Auditory Display

International Workshop/Seminar Hosting:

CHI 2021 workshop on Complexity Methods for HCI

CHI 2022 workshop on Compatible Collaborative Approaches in Medical Research

(Proposed for CHI'25) Towards "Cross-sensory Interaction": How Should we Leverage Crossmodal Cognition & Neuroplasticity in HCI?

Review for Top-ranked International Conferences since 2019:

CHI, CSCW, DIS, Ubicomp/ISWC, Worldhaptics, Eurohaptics, ICAD

PROFESSIONAL MEMBERSHIP

Member of the Association for Computing Machinery (ACM) since 2017

PUBLIC ENGAGEMENT AND RESEARCH OUTREACH

First Lego League (FLL) Robotics Competition

Co-organiser for the London East, First Lego League (FLL) Robotics design competition. We hosted this event for the purpose of encouraging and engaging young talents to get more involved with STEM subjects.

The event website: https://firstlegoleague.theiet.org.

The event photos: https://www.flickr.com/photos/eecs_qmul/albums/72157703849093212

TeenTech Event

Representative of QMUL for the TeenTech Event: This event aims to present a variety of science, technology and engineering in a friendly and warm approach to teenagers.

The event website: https://www.teentech.com/teentech-events/

DESIGN WORK

Visual Identification system for the Museum of Chinese Academy

Designer of the Museum of Chinese Academy Logo and the leading designer of the Visual Identity System.

The museum website: http://ylsy.hnu.edu.cn/wbly/wbsy.htm

Campus Magazine Designer

Book and visual designer, co-editor of a campus Magazine Lu Ming (The voice of Yue Lu Academy) from 2013-2014. This magazine is an experimental attempt to introduce and call for integrated Design thinking with related MBA subjects. It was a monthly issue from the joined effort of students in Design school (where I was) and Business school.

LANGUAGES

Chinese: Native English: Professional

Danish: Basic, still learning

OTHER INFORMATION

Google Scholar

https://scholar.google.co.uk/citations?user=IHMO_zOAAAAJ&hl=en&authuser=1

Feng's Website

https://fengxiwu.org

Feng's Visual Art

https://www.instagram.com/mu_mu_feng/

REFERENCES

Dr. Elisa Mekler

Associate Professor, IT University of Copenhagen Rued Langgaards Vej 7, Copenhagen 2300 elme@itu.dk

Dr. Oussama Metatla

Senior Lecturer (Associate Professor) in HCI, University of Bristol Merchant Venturers Building, Woodland Road, Clifton Bristol BS8 1UB o.metatla@bristol.ac.uk

Dr. Anne Roudaut

Professor in HCI, Director of the Bristol Interaction Group (BIG), University of Bristol Merchant Venturers Building, Woodland Road, Clifton Bristol BS8 1UB Anne.Roudaut@bristol.ac.uk

Dr. Janne Lindqvist

Professor in HCI, Head of the Dept. Computer Science, Aalto University Konemiehentie 2, Espoo 02150 janne.lindqvist@aalto.fi