





+447477921206 
m.umair7@lancaster.ac.uk 
B28, InfoLab21, Lancaster University, Lancaster, UK 
<https://www.lancaster.ac.uk/people-profiles/muhammad-umair> 

Muhammad Umair

RESEARCH INTERESTS

Human-computer interaction, Digital health, Biosensing, Wearables.

APPOINTMENTS

Lancaster University Research Associate, School of Computing and Communications	Lancaster, UK Sep. 2017 – Present
KTH Royal Institute of Technology Visiting Researcher, Division of Media Technology and Interaction Design	Stockholm, Sweden Apr. 2019 – May 2019
Electronics and Telecommunication Research Institute Graduate Researcher	Daejeon, South Korea Aug. 2013 – Aug. 2017
UTrade (Pvt) Limited Mobile Developer Executive	Rawalpindi, Pakistan Jan. 2013 – July. 2013
EarthFactor (Pvt) Limited Assistant Java Developer	Islamabad, Pakistan Jul. 2012 – Dec. 2012

EDUCATION

Lancaster University Ph.D. in Computer Science Advisor: Prof. Corina Sas	Lancaster, UK Sep. 2017 – Present
University of Science and Technology Master of Engineering (MS) in Computer Software Advisor: Prof. Sungwon Yi, Prof. Wan Seok Kim	Daejeon, South Korea Aug. 2017
National University of Science and Technology Bachelor of Information and Communication System Engineering	Islamabad, Pakistan Aug. 2012

AWARDS & HONORS

Honourable Mention Award ACM Conference on Human Factors in Computing Systems - CHI'19	May. 2019
Marie Skłodowska-Curie Actions - Research Fellowship European Commission (EU) - Horizon 2020 AffecTech: Personal Technologies for Affective Health	Sep. 2017
Second Place, Idea Contest - Utilizing 3D Printing - KRW 500000 University of Technology (UST), Daejeon, South Korea	Nov. 2015

Third Place in 4th Creative ICT Idea Camp - KRW 2.5 million Institute for Information & Communication Technology Planning & Evaluation (IITP), South Korea	Dec. 2014
Best Presenter Award 19th workshop on Information Communications Applications Technology (ICAT'14)	Mar. 2014
Outstanding Paper Award 16th International Conference on Advanced Communication Technology (ICACT'14)	Feb. 2014
Scholarship for Master of Engineering - KRW 20 million p.a Computer Software - University and Technology (UST), Daejeon, South Korea	Aug. 2013

PUBLICATIONS

Refereed Conference Papers

Muhammad Umair, Corina Sas, Miquel Alfaras. ThermoPixels: Toolkit for Personalizing Arousal-based Interfaces through Hybrid Crafting. ACM Conference on Designing Interactive Systems (DIS'20). Eindhoven, Netherlands. July 2020

Corina Sas, Kobi Hartley, **Muhammad Umair**. ManneqKit Cards: A Kinesthetic Empathic Design Tool Communicating Depression Experiences. ACM Conference on Designing Interactive Systems (DIS'20). Eindhoven, Netherlands. July 2020

Miquel Alfaras, Vasiliki Tsaknaki, Pedro Sanches, Charles Windlin, **Muhammad Umair**, Corina Sas, Kristina Höök. From Biodata to Somadata. ACM Conference on Human Factors in Computing Systems (CHI'20). Honolulu, Hawai'i, USA. April 2020

Muhammad Umair, Corina Sas, Muhammad Hamza Latif. Towards Affective Chronometry: Exploring Smart Materials and Actuators for Real-time Representations of Changes in Arousal. ACM Conference on Designing Interactive Systems (DIS'19). San Diego, USA. June 2019

Pedro Sanches, Axel Janson, Pavel Karpashevich, Camille Nadal, Chengcheng Qu, Claudia Daudén Roquet, **Muhammad Umair**, Charles Windlin, Gavin Doherty, Kristina Höök, Corina Sas. HCI and Affective Health: Taking stock of a decade of studies and charting future research directions. ACM Conference on Human Factors in Computing Systems (CHI'19). Glasgow, UK. May 2019

Best Paper Honorable Mention

Posters, Demos, and Workshop Papers

Muhammad Umair, Niaz Chalabianloo, Corina Sas, Cem Esroy. A Comparison of Wearable Heart Rate Sensors for HRV Biofeedback in the Wild: An Ethnographic Study. 25th Annual CyberPsychology, CyberTherapy & Social Networking Conference (CYPSY25), Milan, Italy. June 2020

Muhammad Umair, Miquel Alfaras, Hugo Gamboa, Corina Sas. Experiencing discomfort: designing for affect from first-person perspective. ACM Conference on Pervasive and Ubiquitous Computing (UbiComp'19). London, UK. September 2019

Kieran Woodward, Eiman Kanjo, **Muhammad Umair**, Corina Sas. Harnessing digital phenotyping to deliver real-time interventional bio-feedback. ACM Conference on Pervasive and Ubiquitous Computing (UbiComp'19). London, UK. September 2019

Muhammad Umair, Corina Sas. Problems in Practice: Critiquing on Thermochromic based Displays for Representing Skin Conductance. ACM Conference on Human Factors in Computing Systems (CHI'19). Glasgow, UK. May 2019

Corina Sas, **Muhammad Umair**, Muhammad Hamza Latif. Designing for Self-Regulation from both Pragmatic and Critical Design Lenses. ACM Conference on Designing Interactive Systems (DIS'18). Hong Kong. June 2018

Muhammad Umair, Muhammad Hamza Latif, Corina Sas. Dynamic Displays at Wrist for Real Time Visualization of Affective Data. ACM Conference on Designing Interactive Systems (DIS'18). Hong Kong. June 2018

STUDENT CO-ADVISING & MENTORING

Undergraduate

Cristina Luca (Lancaster University)	Oct. 2019 – Mar. 2020
Lydia Edwards (Lancaster University)	Oct. 2019 – Mar. 2020
Lukas Mizgiris (Lancaster University)	Oct. 2019 – Mar. 2020
Kobi Hartley (Lancaster University)	Oct. 2018 – Mar. 2019
Chun Yin Yung (Lancaster University)	Oct. 2018 – Mar. 2019
Nathan Vanderpuye (Lancaster University)	Oct. 2018 – Mar. 2019
Muhammad Hamza Latif (Lancaster University)	Oct. 2017 – Mar. 2018

SELECTED MEDIA COVERAGE

Mirror. [June 28, 2019 - Smart wristband that can read your MOOD developed by British scientists](#)

BBC Radio 2 – [Steve Wright in the Afternoon](#)

Forbes. [June 28, 2019 - Can Smart Materials Really Read Our Emotions?](#)

Mail Online UK. [July 3, 2019 - Experimental wristband may give wearer feedback on moods](#)

Reuters. [July 3, 2019 - Experimental wristband may give wearer feedback on moods](#)

Metro (Scotland). [July 1, 2019 - Wrist control of feelings with a smart arm band](#)

The Sun (Scotland). [July 1, 2019- Heart on your wrist](#)

Metro (London). [July 1, 2019 - Wrist control of feelings with a smart arm band](#)

The Sun. [July 1, 2019 - Emotions Band 'aid'](#)

Yahoo News. [July 3, 2019 - Experimental wristband may give wearer feedback on moods](#)

Health Day. [July 1, 2019 – How Are You Feeling? Check Your Wristbands](#)

Science Daily. [June 28, 2019 - Smart materials provide real-time insight into wearers' emotions](#)

U.S News. [July 1, 2019 - How Are You Feeling? Check Your Wristbands](#)

SERVICE

- Website Chair ACM Conference on Creativity & Cognition Conference (C&C) 2020
- ACM CHI 2017-2020
- ACM DIS 2018-2020
- IEEE ICC 2015-2017

REFERENCES

Corina Sas

Professor, *Computing and Communications*
Lancaster University, UK
c.sas@lancaster.ac.uk

Kristina Höök

Professor, *Interaction Design*
Royal Institute of Technology (KTH), Sweden
khook@kth.se