

# ZHANNA SARSENBAYEVA

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<https://zhannina.github.io/>

## EDUCATION

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<b>The University of Melbourne, Melbourne, Australia</b> <b>PhD</b> in Computer Science (Engineering) <i>Thesis: Quantifying the Effects of Situationally-Induced Impairments and Disabilities on Mobile Interaction</i>	2017 – 2020
<b>University of Oulu, Oulu, Finland</b> <b>MSc</b> in Computer Science and Engineering <i>Thesis grade - Excellent</i>	2014 – 2016
<b>University College London, London, UK</b> <b>BSc</b> in Computer Science (Hons.)	2007 – 2010

## ACADEMIC APPOINTMENTS

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<b>Postdoctoral Research Fellow</b> The University of Melbourne, Melbourne, Australia	March 2020 – March 2023
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## AWARDS AND RECOGNITION

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- 2021:** CIS ECR grant (20,000 AUD), The University of Melbourne, Melbourne, Australia
- 2020:** Doreen Thomas Postdoctoral Fellowship (298,375 AUD), The University of Melbourne, Melbourne, Australia
- 2019:** Gaetano Borriello Outstanding Student Award for outstanding research contributions and service to the field of ubiquitous and pervasive computing, UbiComp'19, London, UK
- 2019:** Google PhD Fellowship in Human-Computer Interaction (15,000 AUD)
- 2019:** Diane Lemaire Scholarship, School of Engineering, The University of Melbourne. Awarded to only 1 female student per year (7,000 AUD)
- 2018:** Best Presentation Award – Honourable Mention, Doctoral Colloquium, UbiComp'18, Singapore
- 2018:** UbiComp'18 Travel Grant, Singapore
- 2018:** Google PhD Travel Scholarship
- 2017:** SIGCHI Best of OzCHI Honourable Mention Award (top 5% of papers), OzCHI 2017, Brisbane, Australia
- 2017:** Google PhD Travel Scholarship
- 2017:** Melbourne Research Scholarship, The University of Melbourne
- 2017:** Best Poster Award – Honourable Mention, Doctoral Colloquium, The University of Melbourne, Australia
- 2016:** Best Project Award, International UBI Summer School 2016, Oulu, Finland
- 2015:** Best Presentation Award, International UBI Summer School 2015, Oulu, Finland

## ADDITIONAL WORK EXPERIENCE

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<b>Research Assistant</b> The University of Melbourne, Melbourne, Australia	Feb 2019 – Oct 2019
<b>Tutor (Fundamentals of Interaction Design)</b> The University of Melbourne, Melbourne, Australia	Semester 2, 2019
<b>Tutor (Designing Novel Interactions)</b> The University of Melbourne, Melbourne, Australia	Semester 1, 2019
<b>Tutor (Fundamentals of Interaction Design)</b> The University of Melbourne, Melbourne, Australia	Semester 2, 2018
<b>Tutor (Graphics and Interaction, Fundamentals of Interaction Design)</b> The University of Melbourne, Melbourne, Australia	Semester 2, 2017
<b>Android Developer</b> <a href="https://intellection.kz/">https://intellection.kz/</a> Almaty, Kazakhstan	2016 – 2017
<b>Research Assistant</b> Center for Ubiquitous Computing University of Oulu, Finland	Sep 2015 – Dec 2016
<b>Teaching Assistant</b> Nazarbayev University, Astana, Kazakhstan	2011 – 2014
<b>Technical Consultant</b> Medtronic, Almaty, Kazakhstan	2010 – 2014

## EXTRACURRICULAR ACTIVITIES

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- 2019:** Melbourne Knowledge Week, Melbourne, Australia (Demo: Emotion Detection Using Smartphones)
- 2018:** Secretary at Computer and Information Systems Research Students Organisation (CIS-GReS), The University of Melbourne, Australia
- 2017:** The University of Melbourne Open Day, Australia (Demo: Emotion Detection Using Smartphones)

## ACADEMIC SERVICE

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- 2021:** AC for MobileHCI **2020:** Video Previews Co-Chair, CHI'20, Hawaii, USA
- 2020:** External Reviewer for CHI, MobileHCI
- 2019:** External Reviewer for IJHCS, IMWUT
- 2019:** Co-organiser, Workshop on Addressing the Challenges of Situationally-Induced Impairments and Disabilities in Mobile Interaction, CHI'19, Glasgow, UK
- 2019:** Video Previews Co-Chair, CHI'19, Glasgow, UK
- 2018:** Co-organiser, Workshop on Ubiquitous Mobile Sensing: Behaviour, Mood, and Environment, UbiComp'18, Singapore
- 2018:** Student Volunteer, UbiComp'18, Singapore
- 2018:** Student Volunteer Chair, OzCHI'18, Melbourne, Australia

**2018:** Student Design Challenge Chair, OzCHI'18, Melbourne, Australia  
**2018:** External Reviewer for IMWUT, MobileHCI, OzCHI  
**2017:** External Reviewer for IMWUT, OzCHI  
**2017:** Student Volunteer, OzCHI 2017, Brisbane, Australia  
**2016:** Student Volunteer, International UBI Summer School 2016, Oulu, Finland

## SUPERVISED MSC THESES

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**2021:** Yifan Cai (MSc, Co-supervisor) **2020:** Sicheng Sun (MSc, Co-supervisor) **2020:** Chuangang Xia (MSc, Primary supervisor) **2020:** Eylul Ertay and Hao Huang (MSc, Co-supervisor) **2020:** Shu Yan (MSc, Co-supervisor (Tech)) **2018:** Silan Li (MSc, Co-supervisor (Tech)) **2018:** Jia Liu (MSc, Co-supervisor (Tech))

## INVITED TALKS

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**2019:** "Situational Impairments in Mobile Interaction", The University of Dundee, UK  
**2019:** "Situational Impairments in Mobile Interaction", The University of Melbourne, Australia  
**2018:** "Enhancing Mobile Interaction during Situational Impairments", The University of Manchester, UK

## PUBLICATIONS

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**2021** W. Jiang, Z. Sarsenbayeva, N. van Berkel, C. Wang, D. Yu, J. Wei, J. Goncalves, V. Kostakos (2021). User Trust in Assisted Decision-Making Using Miniaturized Near-Infrared Spectroscopy. In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems 2021 (CHI21), to appear.

### 2020

K. Yang, C. Wang, Z. Sarsenbayeva, B. Tag, T. Dingler, G. Wadley, J. Goncalves (2020). Benchmarking Commercial Emotion-Detection Systems using Realistic Distortions of Facial Image Datasets. The Visual Computer, 1:20.

Z. Sarsenbayeva, G. Marini, N. van Berkel, C. Luo, W. Jiang, K. Yang, G. Wadley, T. Dingler, V. Kostakos, J. Goncalves (2020). Does Smartphone Use Drive our Emotions or vice versa? A Causal Analysis. In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems 2020 (CHI'20), 193:1-193:14.

D. Hettiachchi, Z. Sarsenbayeva, F. Allison, N. van Berkel, T. Dingler, G. Marini, V. Kostakos, J. Goncalves (2020). Hi! I am the Crowd Tasker Crowdsourcing through Digital Voice Assistants. In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems 2020 (CHI'20), 36:1-36:15.

C. Wang, Z. Sarsenbayeva, X. Chen, T. Dingler, J. Goncalves, V. Kostakos (2020). Accurate Measurement of Hand-Wash Quality Using Sensor Armbands: Instrument Validation Study. JMIR mHealth and uHealth, 8(3), e17001:1-e17001:18.

N. van Berkel, J. Goncalves, S. Hosio, Z. Sarsenbayeva, E. Velloso, V. Kostakos (2020). Overcoming Compliance Bias in Self-Report Studies: A Cross-Study Analysis. International Journal of Human-Computer Studies, 134, 1-12.

## 2019

Z. Sarsenbayeva, N. van Berkel, D. Hettiachchi, W. Jiang, T. Dingler, E. Velloso, V. Kostakos, J. Goncalves (2019). Measuring the Effects of Stress on Mobile Interaction. Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (**IMWUT, UbiComp'19**), 3(1), 24:1-24:18.

Z. Sarsenbayeva, N. van Berkel, W. Jiang, D. Hettiachchi, V. Kostakos, J. Goncalves (2019). Effect of Ambient Light on Mobile Interaction. Proceedings of the 17th IFIP TC.13 International Conference on Human-Computer Interaction (INTERACT'19), Lecture Notes in Computer Science, vol 11748. Springer, Cham.

Z. Sarsenbayeva, V. Kostakos, J. Goncalves (2019). Situationally-Induced Impairments and Disabilities Research. In Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems (CHI'19 EA).

C. Wang, Z. Sarsenbayeva, C. Luo, J. Goncalves, V. Kostakos (2019). Improving Wearable Sensor Data Quality Using Context Markers. Adjunct Proceedings of the 2019 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp'19 Adjunct), 598-601.

G.W. Tigwell, Z. Sarsenbayeva, B.M. Gorman, D.R. Flatla, J. Goncalves, Y. Yesilada, J.O. Wobbrock (2019). Addressing the Challenges of Situationally-Induced Impairments and Disabilities in Mobile Interaction. In Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems (CHI'19 EA).

C. Luo, A. Visuri, S. Klakegg, N. van Berkel, Z. Sarsenbayeva, A. Möttönen, J. Goncalves, T. Anagnostopoulos, D. Ferreira, H. Flores, E. Velloso, V. Kostakos (2019). Energy-Efficient Prediction of Smartphone Unlocking, Personal and Ubiquitous Computing, 23(1), 159-177.

## 2018

Z. Sarsenbayeva, N. van Berkel, E. Velloso, V. Kostakos, J. Goncalves (2018). Effect of Distinct Ambient Noise Types on Mobile Interaction. Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (**IMWUT, UbiComp'18**), 2(2), 82:1-82:23.

🏆 S. Klakegg, J. Goncalves, C. Luo, A. Visuri, A. Popov, N. van Berkel, Z. Sarsenbayeva, V. Kostakos, S. Hosio, S. Savage, A. Bykov, I. Meglinski, D. Ferreira (2018). Assisted Medication Management in Elderly Care Using Miniaturised Near-Infrared Spectroscopy. Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (**IMWUT, UbiComp'18**), 2(2), 69:1-69:24. Best Paper Award

🏆 Zhanna Sarsenbayeva. Situational Impairments during Mobile Interaction. Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT, UbiComp'18 Adjunct) 1(1), 11:498-11:503. Best Presentation – Honourable Mention Award

O. Matthews, Z. Sarsenbayeva, W. Jiang, J. Newn, E. Velloso, S. Clinch, J. Goncalves (2018). Inferring the Mood of a Community From Their Walking Speed: A Preliminary Study. Adjunct Proceedings of the 2018 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp'18 Adjunct), 1144-1149.

W. Jiang, G. Marini, N. van Berkel, Z. Sarsenbayeva, C. Luo, X. He, T. Dingler, Y. Kawahara, V. Kostakos. A Mobile Scanner for Probing Liquid Samples in Everyday Settings. Proceedings of the 2018 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp'18 Adjunct), 1172-1177.

A. Visuri, K. Asare, E. Kuosmanen, Y. Nishiyama, D. Ferreira, Z. Sarsenbayeva, J. Goncalves, N. van Berkel, G. Wadley, V. Kostakos, S. Clinch, O. Matthews, S. Harper, A. Jenkins, S. Snow, m. c. schraefel

(2018). Ubiquitous Mobile Sensing: Behaviour, Mood, and Environment. Adjunct Proceedings of the 2018 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp'18 Adjunct), 1140-1143.

S. Mayer, L. Lischke, J. E. Grønbaek, Z. Sarsenbayeva, J. Vogelsang, P. Woźniak, N. Henze, G. Jacucci. Pac-Many: Movement Behavior when Playing Collaborative and Competitive Games on Large Displays. In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems 2018 (**CHI'18**), 539:1-539:10.

## 2017

🏆 Z. Sarsenbayeva, N. van Berkel, C. Luo, V. Kostakos, J. Goncalves (2017). Challenges of Situational Impairments during Interaction with Mobile Devices. Proceedings of the 29th Australian Conference on Human-Computer Interaction (OzCHI'17), 477-481. Best Paper – Honourable Mention Award

Z. Sarsenbayeva, N. van Berkel, A. Visuri, S. Rissanen, H. Rintamaki, V. Kostakos, J. Goncalves (2017). Sensing Cold-Induced Situational Impairments in Mobile Interaction using Battery Temperature. Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (**IMWUT, UbiComp'17**), 1(3), 98:1-98:10.

Z. Sarsenbayeva, D. Ferreira, N. van Berkel, C. Luo, M. Vaisanen, V. Kostakos, J. Goncalves (2017). Vision-Based Happiness Inference: A Feasibility Case-Study. Adjunct Proceedings of the 2017 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp'17 Adjunct), 494-499.

A. Visuri, Z. Sarsenbayeva, N. van Berkel, J. Goncalves, R. Rawassizadeh, V. Kostakos, D. Ferreira (2017). Quantifying Sources and Types of Smartwatch Usage Sessions. In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems 2017 (**CHI'17**), 3569-3581.

J. Goncalves, Z. Sarsenbayeva, N. van Berkel, C. Luo, S. Hosio, S. Rissanen, H. Rintamaki, V. Kostakos (2017). Tapping Task Performance on Smartphones in Cold Temperature. Interacting with Computers, 29(3), 355-367.

## 2016

Z. Sarsenbayeva, J. Goncalves, J. Garcia, S. Blakeegg, S. Rissanen, H. Rintamaki, J. Hannu, V. Kostakos (2016). Situational Impairments to Mobile Interaction in Cold Environments. In Proceedings of the 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing (**UbiComp'16**), 85-96.

A. Visuri, Z. Sarsenbayeva, J. Goncalves, E. Karapanos, S. Jones (2016). Impact of Mood Changes on Application Selection. In Adjunct Proceedings of the 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp'16 Adjunct), 535-540.