

Summary

Interdisciplinary researcher focused on both the micro- and macro-impacts of digital technology on people and society, with extensive background in many areas of human-computer interaction. Research topics include economics, crowdsourcing, user behaviour, and digital markets at internet-scale; particularly as they extend and shape broader policy. ACM SIGCHI member with extensive experience in both commercial and academic settings, and a broad, practical skill set embracing a wide array of modern technologies. With a dedication to education and dissemination of research output, and a proven track record of designing, developing, and managing projects from conception through completion, backed by strong interpersonal skills.

Education

PhD in Engineering at University of Cambridge (Christ's College) 2014 – 2018
Formerly, PhD in Computer Science at University of St Andrews

Microtask Design: Value, Engagement, Context, and Complexity

Interdisciplinary research focusing on the emerging digital labour force, with robust quantitative, statistical analysis. Topics include improving understanding of financial motivations, aesthetic and practical considerations, improving the user experience, and expanding the potential uses of such web-based platforms. Additional focus on ethics, mobile and sensor technologies, comprehensive telemetry and instrumentation, and exploratory work on complex *macrotasks* and programmer behaviour. Supervised by Dr Per Ola Kristensson.

BSc (Hons) Information Systems (1st) at Brunel University 2008 – 2012

Included "Constructions of Programs", "Business Computing", "Professional Software Practice", "Database Systems", and "e-Commerce." Recipient of the Blackwell Publishing Prize for best written undergraduate dissertation.

Academic Experience

Research Associate at University of Cambridge Dec '16 – Present
Including, membership of the [Centre for Science and Policy](#) network

Research Associate in the [Intelligent Interactive Systems](#) group, led by Dr Per Ola Kristensson. Areas of interest include a wide variety of research topics including crowdsourcing, software development, ubiquitous computing, and interface design. Current work involves the investigation and application of mobile

crowdsourcing, user interface optimisation, machine learning, the application of virtual and augmented reality, and the broader impacts of computer and digital technologies on individuals, organisations, and the wider world.

Tutoring and Assessment at University of Cambridge

Dec '16 – Present

Group leader for the Crowdsourcing session for the Engineering Design Reading Group for postgraduate students. **Assessment** of student presentations for the undergraduate Product Design course. **Supervision** of final year project students.

4F14: Computer Systems (Parallel Programming)

Lecturer and assessor for multithreaded programming using the C++11/14/17 memory model and threading libraries.

Lecturer for 5th Summer School on Computational Interaction

2019

Lecturer for session on "Statistical decoding for Human Computer Interaction." Session involved introduction to Bayesian optimisation, probabilistic decoding, and language modelling for predictive text input methods.

Tutoring and Assessment at University of St Andrews

Sep '12 – Apr '14

Code First: Girls

Leading programming classes for the *Code First: Girls* programme to encourage and engage women in computer science and STEM subjects. Classes included Ruby, HTML5, CSS, Git and other modern web technologies.

Lecture Preparation for introductory classes on web development for undergraduate students. **Assessment** of undergraduate student presentations on a variety of Computer Science research topics.

Consultant at Jason Jacques Consultancy

Dec '18 – Present

Formerly, Freelance Consultant (Sep '07 – Dec '18)

Various projects on a freelance or consultancy basis including network architecture, systems integration, bespoke web-applications, and proprietary prototypes for web, mobile, and VR in various development languages. Contracts include clients such as AOL, Huawei, and the University of Cambridge.

Publications

Dudley, J.J., Jacques, J.T. and Kristensson, P.O. 2021. Crowdsourcing Design Guidance for Contextual Adaptation of Text Content in Augmented Reality. In *Proceedings of the 39th ACM Conference on Human Factors in Computing Systems (CHI 2021)*. ACM Press: <https://doi.org/10.1145/3411764.3445493>.

Uzor, S., Jacques, J.T., Dudley, J.J., and Kristensson, P.O. 2021. Investigating the Accessibility of Crowdwork Tasks on Mechanical Turk. In *Proceedings of the 39th ACM*

Conference on Human Factors in Computing Systems (CHI 2021). ACM Press:
<https://doi.org/10.1145/3411764.3445291>.

Jacques, J.T. and Kristensson, P.O. 2021. Studying Programmer Behaviour at Scale: A Case Study Using Amazon Mechanical Turk. In *Proceedings of <Programming> 2021 (PX/21)*. ACM Press: Forthcoming.

Jacques, J.T. 2020. CHI 2020: Right Here, Right Now? In *Extended Abstracts CHI Conference on Human Factors in Computing Systems Proceedings (CHI 2020; alt.chi 2020)*. ACM Press: Paper ALT01. <https://doi.org/10.1145/3334480.3381806>

Jacques, J.T. 2020. Labor Migration in the Digital Economy. In *Worker-Centered Design: Expanding HCI Methods for Supporting Labor at CHI'20 (CHI 2020; workshop)*. <https://jsonj.co.uk/cam/2020/chi/wcd-lmde>

Jacques, J.T. and Kristensson, P.O. 2019. Crowdsourcing Economics in the Gig Economy. In *CHI Conference on Human Factors in Computing Systems Proceedings (CHI 2019)*. ACM Press: Paper 391. <https://doi.org/10.1145/3290605.3300621>

Dudley, J.J., **Jacques, J.T.** and Kristensson, P.O. 2019. Crowdsourcing Interface Feature Design with Bayesian Optimization. In *CHI Conference on Human Factors in Computing Systems Proceedings (CHI 2019)*. ACM Press: Paper 252. <https://doi.org/10.1145/3290605.3300482>

Jacques, J.T. (2018). Microtask Design: Value, Engagement, Context, and Complexity (PhD thesis). University of Cambridge. <https://doi.org/10.17863/CAM.18777>

Jacques, J.T. and Kristensson, P.O. 2017. Design Strategies for Efficient Access to Mobile Device Users via Amazon Mechanical Turk. In *Proceedings of First ACM Workshop on Mobile Crowdsensing Systems and Applications (CrowdSenSys 2017)*. ACM Press: 26-31. <https://doi.org/10.1145/3139243.3139247>

Hirth, M., **Jacques, J.T.**, Rodgers, P., Scekcic, O. and Wybrow, M. 2017 Crowdsourcing Technology to Support Academic Research. In *Archambault D., Purchase H., Hoßfeld T. (eds) Evaluation in the Crowd. Crowdsourcing and Human-Centered Experiments. Lecture Notes in Computer Science, vol 10264*. Springer: 70-95. https://doi.org/10.1007/978-3-319-66435-4_4

Jacques, J.T. and Kristensson, P.O. 2015. Understanding the effects of code presentation. In *Proceedings of the 6th Workshop on Evaluation and Usability of Programming Languages and Tools (PLATEAU 2015)*. ACM Press: 27-30. <https://doi.org/10.1145/2846680.2846685>

Jacques, J.T., Perry, M. and Kristensson, P.O. 2015. Differentiation of online text-based advertising and the effect on users' click behavior. *Computers in Human Behavior* 50: 535-543. <https://doi.org/10.1016/j.chb.2015.04.031>

Jacques, J.T. and Kristensson, P.O. 2013. Crowdsourcing a HIT: measuring workers' pre-task interactions on microtask markets. In *Proceedings of the 1st AAAI Conference on Human Computation and Crowdsourcing (HCOMP 2013)*. AAAI Press: 86-93.
<http://www.aaai.org/ocs/index.php/HCOMP/HCOMP13/paper/view/7540>

Recognition

Best of CHI 2019 - Crowdworkeer Economics in the Gig Economy

Co-sponsored by ACM SIGCHI Asian Development Committee and HCI Professionals Association of India on 6th of July, 2019 at IIT Bombay, Mumbai. Recognising 20 of the most interesting papers from CHI 2019.

Gordon & Emily Bottomley Fund

Financial award for travel to Dagstuhl Seminar 15481, supporting training, networking, and career development. Award resulted in a collaboration and published chapter in *Crowdsourcing and Human-Centered Experiments*.

Blackwell Publishing Prize

Financial award for best written thesis sponsored by Blackwell Publishing.

Academic Service

Organiser for 4th ACM SIGCHI Summer School on Computational Interaction 2018

Lead organiser for the 4th ACM SIGCHI Summer School on Computational Interaction. Chief point of contact with attendees and with full delegated responsibility for timetabling, catering, accommodation, and more.

Organiser and Lecturer for Cambridge-Tongji Workshop on Engineering Design 2018

Lead organiser for the 1st Cambridge-Tongji Workshop on Engineering Design. Course leader for sessions on both *Crowdsourcing in HCI* and *Systems Architecture*.

Reviewer 2013 – Present

Reviewer for the International Journal of Human Computer Interaction, the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI), the International Conference on Intelligent User Interfaces (IUI), the ACM Symposium on User Interface Software and Technology (UIST), and others.

Conference Support 2013 – Present

Conference support as Student Volunteer for the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI) 2013, 2015; the ACM Interactive Tabletops and Surfaces Conference (ITS) 2013; and the ACM Symposium on User Interface Software and Technology (UIST) 2013.

Commercial Experience

Corporate Operations Engineer at Google

Feb '11 – Sep '11

Technical operations role including both development and infrastructure support:

- Development of security mitigation for well-known FireWire exploit.
- Printer driver standardisation for Mac, with a view to reducing costs.
- Support for Mac, Windows and Linux, including remote support.

IS&T Desktop Services at Apple

Jun '10 – Nov '10

Systems architecture, development and second-line and event support including:

- Server-side system architect for wireless printing (AirPrint) for Europe.
- Development of internal tools for monitoring of servers, employee performance, backup and others.
- Event support for Apple TV re-launch.

Developer & Technical Services at JPMH

Jan '08 – Jul '09

Flexible technical consultation roll providing comprehensive services in an integrated advertising and marketing agency. Client facing support for web services and media projects and onsite liaison for visitors. Work on many high-profile brands including BlackBerry, KFC, Tesco, Nestlé, and others.

Developer at Mirola & Rancon

Oct '06 – Aug '07

Web development and communication network development and support. Key projects included fundraising platform development for Cancer Research UK and lead developer for a proprietary investment-demo of telephone operated audio manipulation system.

Additional Achievements

Opensource software development including [MTurk Manage](#) (Amazon Mechanical Turk task management tool) and [Email](#) (cross-platform email engine for PHP). Minor contribution to [GNU config](#) and an early iteration of the HTTPS/2 standard ([SPDY](#)). Featured anniversary logo for [Slashdot](#). Featured code contribution to the MSDN blog for [Small Basic](#) promoting computer science education.

References

References available on request.