# **Ulrik Lyngs**

# Research summary

**Aims**—to design, build, and evaluate design strategies that help people exercise self-control over use of smartphones and laptops.

**Methods**—controlled studies, user surveys, interviews, co-design workshops, web scraping, behaviour logging.

I am passionate about open and transparent research. Since 2018, I have shared materials, analysis scripts, and data for all my work, and written my papers as reproducible documents in R Markdown1.

### **Education**

2016 — 2020	DPhil in Computer Science, University of Oxford
2012 — 2013	MSc in Cognitive and Evolutionary Anthropology, University of Oxford
2011 — 2016	MA in the Study of Religion & Cognitive Psychology, Aarhus University
2007 — 2011	BA in the Study of Religion & Psychology, Aarhus University
	Awards & honours
2020	Winner of the 2020 Oxford Three Minute Thesis competition <sup>2</sup> , Mathematical, Physical and Life Sciences Division, University of Oxford
	MPLS Impact Awards <sup>3</sup> Commendation Certificate for the Reducing Digital Distraction Workshop, University of Oxford
2019	<b>Best Talk Award</b> , 2019 Oxford Computer Science Conference, University of Oxford
	Best Paper Honorable Mention Award for "Self-Control in Cyberspace", CHI'19: ACM Conference on Human Factors in Computing Systems
2018	<b>Best Paper Award for "Third party tracking"</b> , WebSci'18: ACM Conference on Web Science, Amsterdam
2017	<b>DOMUS Prize for Outstanding Research Communication</b> , Linacre College, University of Oxford
	Grants
2020	van Houten Fund4 (~£12k), The Reducing Digital Distraction (ReDD) Workshop for Oxford University students. Supervisor: Maureen Freed.
2019	<b>EPSRC Doctoral Prize</b> <sup>5</sup> (~£28k), Supporting End-User Autonomy Over Digital Device Use.

Supervisor: Nigel Shadbolt. Mentor: Max Van Kleek.

2018		<b>Student Research Competition Grant</b> (\$500), CHI'18: ACM Conference on Human Factors in Computing Systems		
2017		<b>Workshop Grant, Designing for Curiosity</b> (€400), CHI'17: ACM Conference on Human Factors in Computing Systems		
		<b>Student Research Competition Grant</b> Human Factors in Computing Systems	(\$500), CHI'17: ACM Conference on	
2013		<b>Lienhard &amp; Bagby Research Grant</b> (£1,000), Institute of Social & Cultural Anthropology, University of Oxford		
2008		Summer School Scholarship (~€1000), University of Helsinki		
		Undergraduate Travel Grant (DKK 120	00), Aarhus University	
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		Publications		
		Conference	In computer science, top-tier conferences	
		publications	(<30% acceptance rate) are as, or more	
		(fully reviewed, archival)	impactful than journals, see doi.org/fgjt2h	
2020	C5	From Ancient Contemplative Practice Container for Mindfulness K. Lukoff, <i>U. Lyngs</i> , S. Gueorguieva, E. DIS'20: ACM conference on Designing		
	C4	"I Just Want to Hack Myself to Not G		
		U. Lyngs, K. Lukoff, P. Slovak, W. Seymorkleek, N. Shadbolt CHI'20: ACM Conference on Human Fa	our, H. Webb, M. Jirotka, J. Zhao, M. Van	
2019	C3		Dual Systems Theory to a Review of	
		<b>Digital Self-Control Tools</b> <i>U. Lyngs</i> , K. Lukoff, P. Slovak, R. Binns, Shadbolt	A. Slack, M. Inzlicht, M. Van Kleek, N.	
		CHI'19: ACM Conference on Human Fa		
2018	C2	Third party tracking in the mobile ecosystem R. Binns, U. Lyngs, M. Van Kleek, J. Zhao, T. Libert, N. Shadbolt WebSci'18: ACM Web Science Conference  Best paper award (top 2 papers)		
	C1	"It's Reducing a Human Being to a Pe	ercentage": Perceptions of Justice in	
		Algorithmic Decisions R. Binns, M. Van Kleek, M. Veale, <i>U. Ly</i> CHI'18: ACM Conference on Human Fa		
		Journal articles (fully reviewed, a	archival)	
2016	J1	Hearing in Colour: How Expectations U. Lyngs, E. Cohen, W. Hattori, M. New JEP:HPP: Journal of Experimental Psyc Performance, 42 (12), 2068-2076	vson, D. Levin	

### Extended abstracts and workshop papers

(lightly reviewed)

2020	A9	The ReDD Workshop: A Template for Supporting People in Regaining Control Over Digital Device Use  U. Lyngs, M. Freed, K. Lukoff, P. Slovak, M. Van Kleek CHI'20 workshop: Rethinking Mental Health Resources, Workshop at the ACM Conference on Human Factors in Computing Systems
	A8	Further Exploring Communal Technology Use in Smart Homes: Social Expectations M. Kraemer, <i>U. Lyngs</i> , H. Webb, I. Flechais CHI'20 EA: ACM Conference on Human Factors in Computing Systems
	A7	"What Could Possibly Go Wrong?" Logging HRI Data for Robot Accident Investigations K. Winkle, M. Jirotka, <i>U. Lyngs</i> , C. Macrae, H. Webb, A. Winfield HRI'20 Companion: ACM/IEEE International Conference on Human-Robot Interaction
2019	A6	Putting Self-Control at the Centre of Digital Wellbeing U. Lyngs CHI'19 workshop: Designing for Digital Wellbeing, Workshop at the ACM Conference on Human Factors in Computing Systems
2018	A5	So, Tell Me What Users Want, What They Really, Really Want!  U. Lyngs, R. Binns, M. Van Kleek, N. Shadbolt  CHI'18 EA (alt.chi): ACM Conference on Human Factors in Computing Systems
	A4	A Cognitive Design Space for Supporting Self-Regulation of ICT Use U. Lyngs CHI'18 EA: ACM Conference on Human Factors in Computing Systems
2017	А3	'It's More Fun With My Phone': A Replication Study of Cell Phone Presence and Task Performance U. Lyngs CHI'17 EA: ACM Conference on Human Factors in Computing Systems
	A2	'It's More Fun With My Phone': A Replication Study of Cell Phone Presence and Task Performance  U. Lyngs, R. McKay  CogSci'17: 39th Annual Conference of the Cognitive Science Society
	A1	Curiosity, ICTs, and Attention Management U. Lyngs CHI'17 workshop: Designing for Curiosity: An Interdisciplinary Workshop, ACM Conference on Human Factors in Computing Systems
		Poster presentations

- Connected Life 2018, Oxford Internet Institute, University of Oxford, What the 2018 Р7 Anti-Distraction Market Tells Us About Digital Technology and Self-Regulation
  - Р6 3rd Symposium on Computing and Mental Health, CHI'18, ACM Conference on Human Factors in Computing Systems, Montreal, Canada, A Cognitive Design Space for Supporting Self-Regulation of ICT Use

2017 P5 CogSci'17, 39th Annual Conference of the Cognitive Science Society, London, "It's More Fun With My Phone": A Replication Study of Cell Phone Presence and Task Performance P4 Connected Life 2017: Digital Inequalities, Oxford Internet Institute, University of Oxford, Ulysses in Cyberspace: Evaluating the Anti-Distraction Market Designing for Curiosity, workshop at the CHI'17, ACM Conference on Human P3 Factors in Computing Systems, Denver, Colorado, Curiosity, ICTs and Attention Management: Evaluating the Emerging Anti-Distraction Market 2014 P2 Morality: Evolutionary Origins and Cognitive Mechanisms, Central European University, Budapest, Wild Cooperation: Studying Real-World Reciprocity Using Couchsurfing.org CogSci'11, 33rd Annual Conference of the Cognitive Science Society, Boston, 2011 P1 MA, Priming Effects of Religious Concepts on Moral Judgment – Between Mean

## Talks and panels

Values and Variation

All first-author conference publications listed above were also given as presentations at their respective conferences and are not listed again in this section.

#### **Talks**

DISTRACT<sup>6</sup>, Copenhagen Center for Social Data Science, University of 2020 T26 Copenhagen, Self-Control in Cyberspace: Examining Tools of Resistance in the Battle for Online Attention T25 COINACT7, Institute of Psychology, University of Copenhagen, Cognitive Control in Cyberspace T24 Seminars at Linacre College8, University of Oxford, 'I Just Want to Hack Myself to Not Get Distracted': Do Design Interventions for Self-Control on Facebook Work? T23 Oxford Centre for Hindu Studies, University of Oxford, What Can Digital Humanities Offer Hindu Studies?, online lecture series (6 videos)9 for a general audience T22 Śākta traditions project 10, Oxford Centre for Hindu Studies, University of Oxford, Deus ex Machina: What Can Digital Humanities Offer Hindu Studies? University of Washington DUB Shorts 11, 'I Just Want to Hack Myself to Not Get T21 Distracted': Evaluating Design Interventions for Self-Control on Facebook Google Digital Wellbeing 12, Digital Wellbeing in Practice: Designing for Digital T20 Self-Control T19 Dept. of Computer Science, University of Copenhagen, Digital Wellbeing in Practice: Examining the Effectiveness of Digital Self-Control Strategies Digital Ethnography Group (OxDEG) 13, Oxford Internet Institute, University T18 of Oxford, Digital Wellbeing in Practice: Examining the Effectiveness of Digital Self-Control Strategies R user group Oxford 14, St. Peter's College, University of Oxford, Reproducible 2019 T17

research with R Markdown, featuring paper and PhD thesis writing

	T16	Best of CHI2019, IIT Bombay, Mumbai (videolink), Q&A: Self-Control in Cyberspace
	T15	<b>2019 Oxford Computer Science Conference</b> 15, <b>University of Oxford</b> , Self-Control in Cyberspace: Applying Dual Systems Theory to a Review of Digital Self-Control Tools
	T14	<b>Dept. of Computer Science, University of Oxford</b> , "Owning" Your DPhil, workshop for 1st year DPhil (PhD) students
	T13	Designing for Digital Wellbeing, workshop at the 2019 CHI Conference on Human Factors in Computing Systems, Glasgow, UK, Putting Self-Control at the Centre of Digital Wellbeing
2018	T12	<b>BBC Radio Theatre, New Broadcasting House, London</b> , So, Tell Me What Users Want, What They Really, Really Want!, BBC conference on AI, Society, and the Media 16
	T11	Hackathon at CodeBase, Edinburgh, organised by the UnBias 17 project, University of Oxford, Hacking the Attention Economy
	T10	Human Centred Computing research seminar, Dept. of Computer Science, University of Oxford, Evaluating Anti-Distraction Browser Extensions for Facebook
2017	T09	PubhD18, science communication and pints, St Aldate's Tavern, Oxford, How to Build Minimally-Distracting Technology
	T08	SOCIAM: The Theory and Practice of Social Machines, Jesus College, University of Oxford, Distraction and Self-Regulation in Social Machines
	Т07	<b>DOMUS Research Communication Competition, Linacre College, University of Oxford</b> , Ulysses in Cyberspace: How Anti-Distraction Apps Can Guide Digital Design
	T06	Oxford Computer Science Conference 19, University of Oxford, ICTs and Attention Management: Evaluating the Emerging Anti-Distraction Market
	T05	<b>Human Centred Computing Group, University of Oxford</b> , Battle of the Social Machines: Attention Management in the Information Age, workshop on research ethics: Being Responsible in Research: Opportunities and Challenges
	T04	SOCIAM: The Theory and Practice of Social Machines, all-hands meeting in Brockenhurst, UK, Attention Management in the Information Age
2015	T03	'Religion, Cognition and Culture' research unit, Institute of Culture and Society, Aarhus University, Religion: A Culturally Evolved Tool for Self-Control
2014	T02	<b>26th Annual Human Behavior and Evolution Society Conference, Natal, Brazil</b> , Fundamental Motivations and Risk-Taking: Loss Aversion in Context
2012	T01	Homo Experimentalis: Experimental Approaches in The Study of Religion, Brno, Czech Republic, Effort, Loss Aversion and Religion
		Discussion panels
2019	D2	Futures Thinking Conference 20, Wolfson College, University of Oxford, Psychology and Futurity, roundtable discussion on mental health
	D1	<b>2019 Oxford Computer Science Conference</b> <sup>21</sup> , <b>University of Oxford</b> , Computing Everything? The Limits of Algorithmic Learning, moderator for panel discussion with Richard Evans (Deepmind), Peter Millican, Hao Ni, and Luba Elliott

#### **Podcasts**

2020 Pod1 University of Oxford Podcasts22, Your Digital Life During Lockdown **Press** Our paper "Third Party Tracking in the Mobile Ecosystem" [C2] covered in the 2018 Financial Times23, BBC24, The Times25, Business Insider26, and more Teaching experience 2020 Teaching assistant, Big Data Analytics 27, Oxford Internet Institute, University of Oxford 20 master's students. Taught the practical part of the class on analysing and visualisaing non-normally distributed data in R and RStudio 2019 Instructor, Reproducible research with R Markdown 28, TIER Faculty Development Workshop 29, St. Anne's College, University of Oxford 20 staff and faculty from research institutions across Europe. Developed and taught a 2-day master class in reproducible research Introduction to Evolutionary Psychology, Oxbridge International Summer 2013 School30 10 high school students. Organised and taught a 2-week course with group and individual tutorials 2010 - 2011Philosophy, theory of science, and university history, Dept. for the Study of Religion, Aarhus University 20 undergraduate students. Taught a weekly supplementary seminar to the main lecture series **Service** 2018 - 2020Steering group member, Transparent Statistics in Human-Computer Interaction31 2016 — Reviewer, ACM Transactions on Computer-Human Interaction (TOCHI)32, ACM CHI Conference 33, Computer-Supported Cooperative Work and Social Computing 34, International Journal of Human-Computer Studies 35 Main conference organiser and General Chair, Oxford Computer Science 2018 Conference 2018, Dept. of Computer Science, University of Oxford 2017 — 2018 President of the Computer Science Graduate Society (CoGS), Dept. of Computer Science, University of Oxford 2016 — 2017 DPhil representative in the Computer Science Graduate Society (CoGS), Dept. of Computer Science, University of Oxford Executive committee member in the London Evolutionary Research 2012 - 2016Network<sup>36</sup> (LERN), London, UK 2008 — 2012 Chairman of the Society for the Study of Religion (RvF)37, Dept. for the Study of Religion, Aarhus University

### Selected work experience

Data Scientist and Digital Humanities Consultant, Śākta Traditions38, Oxford 2020 — present Centre for Hindu Studies, University of Oxford I provide practical support and consultancy on natural language processing methods for analysis and visualisation of large text corpora, using reproducible workflows in R Markdown. 2019 — 2020 Research Assistant, RoboTIPS: Developing Responsible Robots for the Digital Economy39 Developed accident scenarios and investigation processes to inform responsible innovation in social robotics, with researchers at the Dept. of Computer Science in Oxford (lead: Prof. Marina Jirotka), and the Bristol Robotics Facility (lead: Prof. Alan Winfield). 2017 — 2019 Web developer, SOCIAM: The Theory and Practice of Social Machines, Dept. of Computer Science, University of Oxford Built www.sociam.org40, which archives outputs of a 5.5 year EPSCR research project involving 55+ researchers, 40+ projects, and 400+ publications). Developed from scratch in Drupal 7, assisted by two summer interns. Ongoing maintenance, feature development, and content curation. 2017 — 2019 Bartender, Linacre College bar, University of Oxford 2013 — 2016 Festival Producer and Manager, Institute of Art and Ideas, London Generated ideas and wrote programme copy for 250+ panel debates for the internationally renowned philosophy and music festival HowTheLightGetsIn41; interviewed (600+) and booked (150+) speakers, including Cory Doctorow, Aubrey de Grey, and Simon Baron-Cohen; led and managed a research team division of two full-time staff plus a music team of three full-time staff. Professional development Invited participant to the Global Dialogue for Happiness, World Government 2018 Summit42, Dubai 2017 Leading for Impact43 fellow, 4-month leadership training programme at Saïd Business School, University of Oxford R packages 2019 oxforddown44, for writing reproducible research theses in R Markdown,

formatted with a traditional University of Oxford LaTeX template

pagedown-cv45, for dynamically generating a curriculum vitae from data held in a spreadsheet into a variety of output formats, using R Markdown and the pagedown R package

2018 - 2020chi20-papers-rmarkdown46, chi-proc-rmd-template47 and chi-eatemplate48, for writing reproducible submissions in R Markdown to the ACM CHI conference

### Personal skills & volunteering

Founding Band Member, The Karaoke Collective 49
 Inventor, MC and drummer; the KC is a group of seasoned musicians in Oxford and London where we blend the fun of karaoke with the magic of a live band.

 Computer Science Ambassador, Dept. of Computer Science, University of Oxford
 I gave regular talks about my group's and my personal research to 14-18 year old students from schools in the UK visiting the Dept. of Computer Science

 Interview Coach, Oxbridge Interviews, Oxfizz 50
 Provided interview training to 30+ teenagers from families not traditionally going to university wishing to apply to Oxford or Cambridge.

# Links

- 1. <a href="https://rmarkdown.rstudio.com">https://rmarkdown.rstudio.com</a> ←
- 2. <a href="https://www.ox.ac.uk/students/three-minute-thesis-competition">https://www.ox.ac.uk/students/three-minute-thesis-competition</a> ←
- 3. <a href="https://www.mpls.ox.ac.uk/news/mpls-impact-awards-2020-winners-announced-at-winter-reception">https://www.mpls.ox.ac.uk/news/mpls-impact-awards-2020-winners-announced-at-winter-reception</a> ←
- 4. <a href="https://governance.admin.ox.ac.uk/van-houten-fund">https://governance.admin.ox.ac.uk/van-houten-fund</a> ←
- 5. <a href="https://epsrc.ukri.org/skills/students/dta/doctoralprize/">https://epsrc.ukri.org/skills/students/dta/doctoralprize/</a> ←
- 6. <a href="https://sodas.ku.dk/projects/distract/+">https://sodas.ku.dk/projects/distract/+</a>
- 7. <a href="https://psychology.ku.dk/coinact/">https://psychology.ku.dk/coinact/</a> ←
- 8. <a href="https://www.linacre.ox.ac.uk/event-type/linacre-seminar-">https://www.linacre.ox.ac.uk/event-type/linacre-seminar-</a>
- 9. <a href="https://www.youtube.com/playlist?list=PLkIUogDmN\_nAEqQphmDffOMBP5ljN-jXA+">https://www.youtube.com/playlist?list=PLkIUogDmN\_nAEqQphmDffOMBP5ljN-jXA+</a>
- 10. <a href="http://saktatraditions.org">http://saktatraditions.org</a> ←
- 11. <a href="https://dub.washington.edu/seminar.html">https://dub.washington.edu/seminar.html</a> →
- 12. <a href="https://wellbeing.google+">https://wellbeing.google+</a>
- 13. <a href="https://www.oii.ox.ac.uk/research/projects/oxdeg/↔">https://www.oii.ox.ac.uk/research/projects/oxdeg/↔</a>
- 14. <a href="https://twitter.com/rusersoxford">https://twitter.com/rusersoxford</a> ←
- 15. <a href="https://oxfordcsc.com">https://oxfordcsc.com</a>
- 16. <a href="https://www.bbc.co.uk/academy/en/events/evt20180704115336827">https://www.bbc.co.uk/academy/en/events/evt20180704115336827</a> ←
- 17. https://unbias.wp.horizon.ac.uk/←
- 18. <a href="http://pubhd.org">http://pubhd.org</a>
- 19. https://oxfordcsc.com←
- 20. <a href="https://www.torch.ox.ac.uk/event/futures-thinking-conference-details-det

- 21. https://oxfordcsc.com ←
- 22. <a href="https://podcasts.ox.ac.uk/your-digital-life-during-lockdown">https://podcasts.ox.ac.uk/your-digital-life-during-lockdown</a> ←
- 23. <a href="https://ig.ft.com/mobile-app-data-trackers/">https://ig.ft.com/mobile-app-data-trackers/</a> ←
- 24. https://www.bbc.co.uk/news/technology-45952466€
- 25. <a href="https://www.thetimes.co.uk/article/personal-data-harvesting-by-mobile-phone-apps-is-out-of-control-pb2m2kwkj">https://www.thetimes.co.uk/article/personal-data-harvesting-by-mobile-phone-apps-is-out-of-control-pb2m2kwkj</a>
- 26. <a href="https://www.businessinsider.com/google-and-facebook-big-data-apps-oxford-study-finds-2018-10?r=UK&IR=T←">https://www.businessinsider.com/google-and-facebook-big-data-apps-oxford-study-finds-2018-10?r=UK&IR=T←</a>
- 27. <a href="https://www.oii.ox.ac.uk/study/courses/big-data-analytics/">https://www.oii.ox.ac.uk/study/courses/big-data-analytics/</a> ←
- 28. <a href="https://ulyngs.github.io/rmarkdown-workshop-2019/€">https://ulyngs.github.io/rmarkdown-workshop-2019/€</a>
- 29. <a href="https://www.projecttier.org/fellowships-and-workshops/faculty-development-workshops/">https://www.projecttier.org/fellowships-and-workshops/faculty-development-workshops/<a href="https://www.projecttier.org/fellowships-and-workshops/faculty-development-workshops/">https://www.projecttier.org/fellowships-and-workshops/faculty-development-workshops/</a></a>
- 30. <a href="https://oxfizz.org/">https://oxfizz.org/</a> →
- 31. <a href="https://transparentstatistics.org">https://transparentstatistics.org</a> ←
- 32. <a href="http://tochi.acm.org/←">http://tochi.acm.org/←</a>
- 33. <a href="https://sigchi.org/←">https://sigchi.org/←</a>
- 34. <u>http://cscw.acm.org/2019/</u> ←
- 35. <a href="https://www.journals.elsevier.com/international-journal-of-human-computer-studies-">https://www.journals.elsevier.com/international-journal-of-human-computer-studies-</a>
- 36. <a href="https://londonevolution.org">https://londonevolution.org</a> ←
- 37. <a href="https://studerende.au.dk/studier/fagportaler/arts/religionsvidenskabelig-forening/">https://studerende.au.dk/studier/fagportaler/arts/religionsvidenskabelig-forening/<a href="https://studerende.au.dk/studier/fagportaler/arts/religionsvidenskabelig-forening/">https://studerende.au.dk/studier/fagportaler/arts/religionsvidenskabelig-forening/<a href="https://studerende.au.dk/studier/fagportaler/arts/religionsvidenskabelig-forening/">https://studerende.au.dk/studier/fagportaler/arts/religionsvidenskabelig-forening/</a></a>
- 38. <a href="http://saktatraditions.org/people/">http://saktatraditions.org/people/</a>
- 39. <a href="https://www.cs.ox.ac.uk/projects/RoboTIPS/index.html">https://www.cs.ox.ac.uk/projects/RoboTIPS/index.html</a> <a href="https://www.cs.ox.uk/projects/RoboTIPS/index.html">https://www.cs.ox.uk/projects/RoboTIPS/index.html</a> <a href
- 40. <a href="https://www.sociam.org">https://www.sociam.org</a>
- 41. <a href="https://howthelightgetsin.org/">https://howthelightgetsin.org/</a><a href="https://howthelightgetsin.org/">https://howthelightgetsin.org/</a><a href="https://howthelightgetsin.org/">https://howthelightgetsin.org/</a></a><a href="https://howthelightgetsin.org/">https://howthelightgetsin.org/</a></a></a>
- 42. <a href="https://www.worldgovernmentsummit.org">https://www.worldgovernmentsummit.org</a> ←
- 43. <a href="https://www.sbs.ox.ac.uk/research/skoll-centre-social-entrepreneurship/social-impact-education/leading-education/leading-impact-education/leading-impact-education/leading-impact-education/leading-impact-education/leading-impact-educ
- 44. <a href="https://github.com/ulyngs/oxforddown">https://github.com/ulyngs/oxforddown</a> ←
- 45. <a href="https://github.com/ulyngs/pagedown-cv+">https://github.com/ulyngs/pagedown-cv+</a>
- 46. https://github.com/ulyngs/chi20-papers-rmarkdown ←
- 47. <a href="https://github.com/ulyngs/chi-proc-rmd-template">https://github.com/ulyngs/chi-proc-rmd-template</a> ←
- 48. <a href="https://github.com/ulyngs/chi-ea-rmd-template">https://github.com/ulyngs/chi-ea-rmd-template</a> ←
- 49. <a href="https://karaokecollective.com">https://karaokecollective.com</a> ←

50. <u>https://oxfizz.org/</u>←