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 2016, I have shared materials, analysis scripts, and data for all my work, and written my papers as reproducible documents in R Markdown 1.

Education

Oxford University students. Supervisor: M. Freed.

2020

2019

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 and honours
2020	Winner of the 2020 Oxford Three Minute Thesis competition ² , Mathematical, Physical and Life Sciences Division, University of Oxford
	MPLS Impact Awards ³ Commendation Certificate for the Reducing Digital Distraction Workshop, University of Oxford
2019	Best Talk Award , 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	Best Paper Award for "Third party tracking" , WebSci'18: ACM Conference on Web Science, Amsterdam
2017	DOMUS Prize for Outstanding Research Communication , Linacre College, University of Oxford
	Grants

van Houten Fund⁴ (~£12k), The Reducing Digital Distraction (ReDD) Workshop for

EPSRC Doctoral Prize 5 (~£28k), Supporting End-User Autonomy Over Digital

Supervisor: Nigel Shadbolt. Mentor: Max Van Kleek.

2018		Student Research Competition Grant (\$500), CHI'18: ACM Conference on Human Factors in Computing Systems
2017		Workshop Grant, Designing for Curiosity (€400), CHI'17: ACM Conference on Human Factors in Computing Systems
		Student Research Competition Grant (\$500), CHI'17: ACM Conference on Human Factors in Computing Systems
2013		Lienhard & Bagby Research Grant (£1,000), Institute of Social & Cultural Anthropology, University of Oxford
2008		Summer School Scholarship (~€1000), University of Helsinki
		Undergraduate Travel Grant (DKK 1200), Aarhus University
		Publications
		Conference publications (fully reviewed, archival) In computer science, top-tier conferences (<30% acceptance rate) are as, or more impactful than journals, see doi.org/fgjt2h
2020	C5	From Ancient Contemplative Practice to the App Store: Designing a Digital Container for Mindfulness K. Lukoff, <i>U. Lyngs</i> , S. Gueorguieva, E. S. Dillman, A. Hiniker, S. A. Munson DIS'20: ACM conference on Designing Interactive Systems
	C4	"I Just Want to Hack Myself to Not Get Distracted": Evaluating Design Interventions for Self-Control on Facebook U. Lyngs, K. Lukoff, P. Slovak, W. Seymour, H. Webb, M. Jirotka, J. Zhao, M. Van Kleek, N. Shadbolt CHI'20: ACM Conference on Human Factors in Computing Systems
2019	C3	Self-Control in Cyberspace: Applying Dual Systems Theory to a Review of Digital Self-Control Tools U. Lyngs, K. Lukoff, P. Slovak, R. Binns, A. Slack, M. Inzlicht, M. Van Kleek, N. Shadbolt CHI'19: ACM Conference on Human Factors in Computing Systems В Best paper honourable mention (top 5%)
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 В Best paper award (top 2 papers)
	C1	"It's Reducing a Human Being to a Percentage": Perceptions of Justice in Algorithmic Decisions R. Binns, M. Van Kleek, M. Veale, <i>U. Lyngs</i> , J. Zhao, N. Shadbolt CHI'18: ACM Conference on Human Factors in Computing Systems
		Journal publications
2016	J1	Hearing in Colour: How Expectations Distort Perception of Skin Tone U. Lyngs, E. Cohen, W. Hattori, M. Newson, D. Levin JEP:HPP: Journal of Experimental Psychology: Human Perception and Performance, 42 (12), 2068-2076

Extended abstracts and workshop papers

(lightly reviewed)

2020	А9	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, U. Lyngs, 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	A3	'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
2018	P7	Connected Life 2018, Oxford Internet Institute, University of Oxford, What the Anti-Distraction Market Tells Us About Digital Technology and Self-Regulation
	P6	3rd Symposium on Computing and Mental Health, CHI'18, Montreal, Canada , A Cognitive Design Space for Supporting Self-Regulation of ICT Use
2017	P5	CogSci 2017, 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
- P3 Designing for Curiosity, workshop at the 2017 CHI Conference on Human 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
- 2011 P1 CogSci 2011, 33rd Annual Conference of the Cognitive Science Society,
 Boston, MA, Priming Effects of Religious Concepts on Moral Judgment Between
 Mean Values and Variation

Talks and panels

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

Talks

- 2020 T26 DISTRACT6, Copenhagen Center for Social Data Science, University of 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
 - 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?
 - 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
 - Sākta 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 Distracted': Evaluating Design Interventions for Self-Control on Facebook
 - T20 **Google Digital Wellbeing** 12, Digital Wellbeing in Practice: Designing for Digital Self-Control
 - Department 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 of Oxford, Digital Wellbeing in Practice: Examining the Effectiveness of Digital Self-Control Strategies
- 2019 T17 **R user group Oxford 14, St. Peter's College, University of Oxford**, Reproducible 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	2019 Oxford Computer Science Conference 15, University of Oxford , Self-Control in Cyberspace: Applying Dual Systems Theory to a Review of Digital Self-Control Tools
	T14	Department of Computer Science, University of Oxford , "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	BBC Radio Theatre, New Broadcasting House, London , 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	DOMUS Research Communication Competition, Linacre College, University of Oxford , 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	Human Centred Computing Group, University of Oxford, 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	26th Annual Human Behavior and Evolution Society Conference, Natal, Brazil , 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	2019 Oxford Computer Science Conference 21, University of Oxford , Computing Everything? The Limits of Algorithmic Learning, moderator for panel discussion with Richard Evans (Deepmind), Peter Millican, Hao Ni, and Luba Elliott

Podcasts

University of Oxford Podcasts22, Your Digital Life During Lockdown 2020 Pod1 Media coverage Our paper 'Third Party Tracking in the Mobile Ecosystem' covered in the Financial 2018 Times 23, BBC 24, The Times 25, Business Insider 26, 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 — 2011 Philosophy, 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 Interaction 31 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 2018 Main conference organiser and General Chair, Oxford Computer Science Conference 2018, Department 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 2012 — 2016 **Executive committee member in the London Evolutionary Research** Network³⁶ (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 Traditions 38, 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.org40, Dept. of Computer Science, University of Oxford Built sociam.org (archiving outputs of a 5.5 year EPSCR research project involving 55+ researchers, 40+ projects, and 400+ publications) 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 of two fulltime and music team of three full-time staff.

Professional development

2018 Invited participant to the Global Dialogue for Happiness, World Government

Summit42, Dubai

2017 Leading for Impact 43 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 single spreadsheet into a variety of different output formats, using R Markdown

and the pagedown package

2018 — 2020 chi20-papers-rmarkdown46, chi-proc-rmd-template47 and chi-eatemplate 48, for writing reproducible submissions in R Markdown to the ACM CHI

conference

Personal skills & volunteering

Founding Band Member, The Karaoke Collective 49 2017 — present

> 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.

- 2017 2019 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 Computer Science Department
- 2013 2016 Interview Coach, Oxbridge Interviews, Oxfizz50
 Provided interview training for 30+ teenagers from families not traditionally going to university wishing to apply to Oxford or Cambridge.

Links

- 1. https://rmarkdown.rstudio.com ←
- 2. https://www.ox.ac.uk/students/three-minute-thesis-competition ←
- 3. https://www.mpls.ox.ac.uk/news/mpls-impact-awards-2020-winners-announced-at-winter-reception ←
- 4. https://governance.admin.ox.ac.uk/van-houten-fund ←
- 5. https://epsrc.ukri.org/skills/students/dta/doctoralprize/ ←
- 6. https://sodas.ku.dk/projects/distract/ ←
- 7. https://psychology.ku.dk/coinact/ ←
- 8. https://www.linacre.ox.ac.uk/event-type/linacre-seminar-
- 9. https://www.youtube.com/playlist?list=PLkIUogDmN_nAEgQphmDffOMBP5ljN-jXA↔
- 10. http://saktatraditions.org ←
- 11. <u>https://dub.washington.edu/seminar.html</u> ←
- 12. https://wellbeing.google+
- 13. https://www.oii.ox.ac.uk/research/projects/oxdeg/₽
- 14. https://twitter.com/rusersoxford ←
- 15. https://oxfordcsc.com €
- 16. https://www.bbc.co.uk/academy/en/events/evt20180704115336827 €
- 17. https://unbias.wp.horizon.ac.uk/
- 18. http://pubhd.org ←
- 19. https://oxfordcsc.com←
- 20. https://www.torch.ox.ac.uk/event/futures-thinking-conference-details €
- 21. https://oxfordcsc.com €
- 22. https://podcasts.ox.ac.uk/your-digital-life-during-lockdown €
- 23. https://ig.ft.com/mobile-app-data-trackers/ ←
- 24. https://www.bbc.co.uk/news/technology-45952466€

- 25. https://www.thetimes.co.uk/article/personal-data-harvesting-by-mobile-phone-apps-is-out-of-control-pb2m2kwkj
- 26. https://www.businessinsider.com/google-and-facebook-big-data-apps-oxford-study-finds-2018-10?r=UK&IR=T←
- 27. https://www.oii.ox.ac.uk/study/courses/big-data-analytics/ https://www.oii.ox.uk/study/courses/big-data-analytics/ https://www.oii.ox.uk/study/courses/big-dat
- 28. https://ulyngs.github.io/rmarkdown-workshop-2019/←
- 29. https://www.projecttier.org/fellowships-and-workshops/faculty-development-workshops/+
- 30. https://oxfizz.org/ →
- 31. https://transparentstatistics.org ←
- 32. http://tochi.acm.org/
- 33. https://sigchi.org/
- 34. <u>http://cscw.acm.org/2019/</u> ←
- 35. https://www.journals.elsevier.com/international-journal-of-human-computer-studies ←
- 36. https://londonevolution.org ←
- 37. https://studerende.au.dk/studier/fagportaler/arts/religionsvidenskabelig-forening/€
- 38. http://saktatraditions.org/people/
- 39. https://www.cs.ox.ac.uk/projects/RoboTIPS/index.html <
- 40. https://www.sociam.org←
- 41. https://howthelightgetsin.org/https://howthelightgetsin.org/https://howthelightgetsin.org/https://howthelightgetsin.org/
- 42. https://www.worldgovernmentsummit.org ←
- 44. https://github.com/ulyngs/oxforddown ←
- 45. https://github.com/ulyngs/pagedown-cv+
- 46. https://github.com/ulyngs/chi20-papers-rmarkdown ←
- 47. https://github.com/ulyngs/chi-proc-rmd-template↔
- 48. https://github.com/ulyngs/chi-ea-rmd-template+
- 49. https://karaokecollective.com ←
- 50. https://oxfizz.org/