

Dr. Aluna Everitt

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I am a researcher in **Human-Computer Interaction, Design, and Engineering** and my expertise are on **digital fabrication approaches for developing novel and emerging technologies**. I have 6 years' experience **conducting quantitative and qualitative research**, showing the versatility of my skills within the HCI field. I have also been involved in **over 300 hours of teaching activities** and **participating in grant writing bids**. Additionally, I have extensive experience in **administrative responsibility** from my 4-year role as an Assistant College Dean. **My research vision** is to bridge the gap between digital and physical spaces by utilising digital fabrication for designing, developing, and evaluating the next generation of interactive and physical interfaces.

Research Positions

<i>Feb 2021 - Present</i>	Research Associate, University of Oxford (Professor Niki Trigoni & Dr Andrew Markham - Cyber Physical Systems) Conducting research in Human-Robot Interaction supported by Amazon Web Services in the Oxford-Singapore Human-Machine Collaboration Programme.
<i>Jan 2021 - Present</i>	Senior Visiting Researcher, Faculty of Engineering, University of Bristol Continuing work on acoustic fabrication and large-scale soft robotics.
<i>June 2019 - Jan 2021</i>	Research Associate, University of Bristol (Prof Mike Fraser & Dr. Anne Roudaut - Bristol Interaction Group) Specialising in developing new fabrication techniques using novel acoustic technologies.
<i>May - Sept 2018</i>	Visiting Researcher, Carleton University, Canada (Prof. Audrey Girouard - Creative Interactions Lab) Designing and developing digital fabrication approach for multi-material 3D printed deformable wearables with embedded electronics and sensors.
<i>June - Oct 2015</i>	Research Assistant, Lancaster University (Dr. Jason Alexander) Research on the development of interactive shape-changing public installations.
<i>June - Sept 2014</i>	Summer Research Intern, HighWire Doctoral Training Centre (Prof Gordon Blair) Multi-disciplinary research infusing computer science, management, and design.

Education Background

<i>Oct 2015 - May 2019</i>	PhD in Computer Science (Human Computer Interaction) School of Computing and Communications, Lancaster University Thesis Title: Supporting the Design and Development of Shape-Changing Displays Through Digital Fabrication Approaches. Supervisor: Dr. Jason Alexander
<i>Sept 2012- June 2015</i>	Undergraduate Bachelor of Science. First Class (Honours) School of Computing and Communications, Lancaster University Bachelor's in Information Technology for Creative Industries. (Software development, web applications, digital imaging, databases, networking) Dissertation: Novel Approach to Interface Fabrication Using Laser Cut Clear Perspex.

Teaching Experience

- 2019 – '20 | **Teaching Associate, Masters - Interactive Devices, University of Bristol**
Supervision on **Masters'** course for designing and developing interactive devices. Student projects accepted for CHI 2020 late breaking work*.
- 2015 – '18 | **Associate Lecturer, Computing and Communications, Lancaster University**
300+ teaching hours. Responsible for supervision of undergraduate labs, independently running seminars, and marking of coursework. Teaching Modules:
- Mentoring Final Year Projects Unit (**3rd Year Undergrad**)
 - Human-Computer Interaction Unit (**2nd Year Undergrad**)
 - Creative Technologies Unit (**1st Year Undergrad**)

Professional/Administrative Experience

- 2015 – '19 | **Assistant Dean, Grizedale College, Lancaster University**
Extensive experience handling disciplinary cases regarding students' behaviour and welfare as well as supporting equity, diversity, and inclusion for students.
- 2013 – '17 | **Freelance Graphic Designer**
Producing digital and print based graphic design content for a range of clients, including logos and company branding identities.

Publications

*Peer Reviewed
Conference Processings*

- Kim, H., **Everitt, A.**, Tejada, C., Zhong, M., Ashbrook, D. MorpheesPlug: A Toolkit for Prototyping Shape-Changing Interfaces. To appear in Proceedings of the Conference on Human Factors in Computing Systems 2021. (**CHI'21**).
- Chinareva, S., Shah, P., Kumpik, D., Jones, J., Tumia, N., **Everitt, A.** Lotus: Mediating Mindful Breathing. Extended abstract at the Conference on Human Factors in Computing Systems 2020. (***CHI'20 LBW**). [[pdf](#)]
- Fraser, M., Liu, J., Shapiro, J., Taylor, J., **Everitt, A.**, Digital-is-Physical: How Functional Fabrication Disrupts Ubicomp Design Principles. Halfway to the Future symposium proceedings, Nottingham, UK. 2019. (**HTFF'19**). [[pdf](#)]
- Sturdee, M., **Everitt, A.**, Lindley, J., Coulton, P., Alexander, J. Visual Methods for the Design of Shape-Changing Interfaces. In IFIP Conference on Human-Computer Interaction (pp. 337-358). Springer, Cham. 2019. (**INTERACT'19**). [[pdf](#)]
- Nabil, S., **Everitt, A.**, Sturdee, M., Alexander, J., Bowen, S., Wright, P., Kirk, D. ActuEating: Designing, Studying and Exploring Actuating Decorative Artefacts. In proceedings of the Conference on Designing Interactive Systems. 2018. (**DIS'18**). [[pdf](#)]
- Everitt, A.**, & Alexander, J. PolySurface: A Design Approach for Rapid Prototyping of Shape-Changing Displays Using Semi-Solid Surfaces. In Proceedings of the 2017 Conference on Designing Interactive Systems. 2017. (**DIS'17**) [[pdf](#)]
- Everitt, A.**, Taher, F., & Alexander, J. ShapeCanvas: An exploration of shape-changing content generation by members of the public. In Proceedings of the Conference on Human Factors in Computing Systems. 2016. (**CHI'16**) [[pdf](#)]

Peer Reviewed
Journal Articles

Everitt, A., & Alexander, J. 3D Printed Deformable Surfaces for Shape-Changing Displays. Research Topic on Shape Changing Robotic Structures and Interfaces. **Frontiers in Robotics & AI 2019.** [[pdf](#)]

Other Publications

Everitt, A., Enabling Digital Fabrication Approaches for the Design and Prototyping of Robotic Artifacts. Position paper for the “Research Through Design Approaches in Human-Robot Interaction” workshop held in conjunction with the 16th international conference on human-robot interaction. **HRI 2021.** [[pdf](#)] [[link](#)]

Everitt, A., Bridging the Gap Between Digital and Physical Design Spaces with Shape-Changing Interfaces. Position paper for the “Where Art Meets Technology: Integrating Tangible and Intelligent Tools in Creative Processes” workshop at SIGCHI Conference on Human Factors in Computing Systems, **CHI 2020.**

Everitt, A., Laser-Cut and 3D Printed Semi-Solid Surfaces as a Fabrication Technique for Developing Shape-Changing Displays. Workshop on Shape Changing Robotic Structures and Interfaces, **IROS 2018.** [[pdf](#)] [[link](#)]

Everitt, A., Taher, F., & Alexander, J., Exploring ShapeCanvas: A Shape-Changing Display for Novice User Content Generation. Position paper for the Sharing Perspectives on the Design of Shape-Changing Interfaces, workshop at SIGCHI Conference on Human Factors in Computing Systems, **CHI 2016.** [[pdf](#)]

Professional Development / Services / Press

Organization
Committees

Organising committee (Demo and Video Chair) for the 21st International Conference on Mobile and Ubiquitous Multimedia. **MUM 2022.**

Organising committee (Social Media Chair) for The ACM International Conference on Mobile Human-Computer Interaction. **MobileHCI 2022.**

Program committee member (Associate Chair) for The ACM International Conference on Mobile Human-Computer Interaction. **MobileHCI 2021.**

Program committee member (Associate Chair) for The ACM CHI Virtual Conference on Human Factors in Computing Systems. **CHI 2021.**

Program committee member (Associate Chair) for the 15th ACM International Conference on Tangible, Embedded and Embodied Interaction. **TEI 2021.**

Program committee member for the 19th International Conference on Mobile and Ubiquitous Multimedia. **MUM 2020.**

Committee member for **CHI 2020** Student Research Competition.

Organiser of visiting speakers and seminars at BIG lab (2019 - 2020).

Press

Press article on my PhD Thesis research by 3DPrint.com (March 2020). [[link](#)]

Selected Invited Talks

Invited **Lecture** at the University of Cardiff (March 2021).

Invited **Lecture** at the University of Bristol (Masters) (December 2020).

Invited **talk** at The Global LED Summit (November 2020).

Invited **talk** at AMNET - Additive Manufacturing Network Symposium (March 2020).

Invited **talk** at Meta Material Workshop, University of Bristol (November 2018).

Invited **talk** at Carleton University (July 2018).

<i>Research Community Engagement</i>	<p>Certified training with Optomec Aerosol Jet 5-Axis 3D printer for printed electronics.</p> <p>Part of the EPSRC UK Metamaterials Network (June 2020).</p> <p>Invited to The Marie Curie Fellowship Master Class at Aarhus University (May 2020).</p> <p>Workshop on Metamaterials and Interaction Design, Lorentz Centre (Jan 2020).</p> <p>SIGCHI Symposium & Summer School on Computational Fabrication and Smart Matter, MIT, Cambridge (June 2017). [link]</p> <p>Dagstuhl Seminar on Shape-Changing Interfaces, Schloss Dagstuhl (Feb 2017). [link]</p> <p>Workshop on 3D printing technologies at Hewlett Packard, California (May 2016).</p>
<i>Reviewing</i>	<p>CHI 2017-2021, UIST 2017-2020, DIS 2017-2021, ISS 2016</p> <p>Frontiers in Robotics and AI Journal 2019,</p> <p>Oxford Academic - Interacting with Computers Journal 2020</p>

Funding

<i>Successful Funding</i>	<p>Internal Faculty Seminar Series Funding: Bristol Interaction Group - £3,000 (2019)</p> <p>Friend's Programme Research Travel Conference Fund - £500 (2019)</p> <p>SIGCHI Summer School Travel Grant - £800 (2017)</p> <p>Graduate School Travel Grant, Lancaster University £1,000 (June 2017)</p> <p>PhD Studentship from the School of Computing and Communications, Lancaster University £40,000 (2015 - 2019)</p>
<i>Grant Bids in Preparation</i>	<p>Marie Curie Fellowship (Aarhus University – 2-year project)</p> <p>UK Research Council EPSRC Co-Investigator Grant Bid (£500,000 proposed)</p>