OLLIE HANTON

07462 615463 oliver@dulwich.co.uk

I am a PhD student researching the **personal fabrication of displays** with a strong expertise in 3D printing, airbrushing and software development. My research vision is to develop ways to produce **free-form displays** that will allow improved interaction with computers. I am looking at leveraging different personal fabrication methods in order to **democratise display fabrication** and allow individual users to liberate displays from their flat rectangular forms.

My degrees in Maths and Computer Science give me a strong technical background, which I combine with commercial experience working as a software developer. I've been invited to talk about my research to multiple external research groups and I've held roles as a student supervisor and teaching assistant for Masters level courses.

EDUCATION

Computer Science PhD in Human Computer Interaction *November 2018 - present*

School of Computer Science, University of Bristol.
Thesis title: 'Creating Free-form Interactive Devices Through Personal Fabrication of Displays'.

Computer Science MSc (Distinction) *2016 - 2017*

School of Computer Science, University of Bristol.
Dissertation title: 'Creating Interactive Prototypes and Surfaces Using Capacitive Technology and 3D Printing'.

Mathematics BSc (2:1) *2012 - 2016*

School of Mathematics, University of Bristol.
Dissertation title: 'The Mathematics Behind Google'.

EMPLOYMENT AND EXPERIENCE

University of Bristol - Teaching Assistant *2019-present*

- Teaching support for masters level students on courses 'Computer Architecture' and 'Interactive Devices'.
- Marking of summative coursework for masters level students on 'Interactive Devices' course.
- Supervision of student intern (Zichao Shen) for a summer placement.

SciSys PLC - Software Developer *February 2018 - October 2018*

- Full-time work on the development of an Android app using Xamarin, working in C# building off a C++ IOS codebase.
- Responsible for code development, version control, testing, bug fixing and customer liaison.

University of Bristol Boat club - Senior Women's Rowing Coach *May 2013 - June 2014*

- Part-time volunteering work coaching, teaching and mentoring teams and individual athletes. 550+ hours carried out, with responsibilities such as budget management and program development.

Placr - Intern *July 2014, August 2015*

- Building of a national geometry of transport links, processing of transport data and web design. Initially a one month internship, but asked to return the following year.

Dulwich Storage Ltd - Admin *Intermittent 2010 - 2013*

- Part-time summer work with responsibilities of managing contractor invoices, accounts and webdesign.

TECHNICAL STRENGTHS

Additive manufacturing methods	3D printing (FDM, SLA), Airbrushing, Electronics Prototyping.
Software & Tools	Blender, GIMP, FIJI, Android, Xamarin, OpenCV, JavaFX.
Computer Languages	Java, C#, R, MATLAB.

PEER REVIEWED PUBLICATIONS

***Hanton, O.**; Wessely, M.; Mueller, S.; Fraser, M.; Roudaut, A.*, ProtoSpray: Combining 3D Printing and Spraying to Create Interactive Displays with Arbitrary Shapes. **CHI 2020 proceedings, Honourable mention.**

*Wessely, M.; Sethapakdi, T.; Castillo, C.; Snowden, J.C.; **Hanton, O.**; Qamar, I.P.; Fraser, M.; Roudaut, A. and Mueller, S.*, Sprayable User Interfaces: Prototyping Large-Scale Interactive Surfaces with Sensors and Displays. **CHI 2020 proceedings.**

ACHIEVEMENTS AND AWARDS

- **Honourable Mention** in CHI2020 conference proceedings (2020).
- Bristol 3-minute thesis runner-up (2019).
- Bristol PLUS Outstanding Award (2015).
- Bristol PLUS Award (2015).

ACADEMIC DEVELOPMENT AND ENGAGEMENT

Peer reviewing and conference engagement:

- MobileHCI 2021 - Associate Chair: role included finding and managing reviewers and writing meta-reviews.
- CHI 2021 - Assistant to Subcommittee (ITDM B): management of Associate chairs and quick/desk rejections.
- 14 peer reviews carried out for conferences (CHI 2020, UIST 2020, TEI 2021, CHI 2021, MobileHCI 2021), with 3 Special Recognitions for Outstanding Reviews.

Invited talks:

- Cardiff University Human Factors Technology group (October 2020).
- MIT's CHI fabrication event (May 2020).
- Bath CHI internal seminar series (May 2020).
- AMNET - Additive Manufacturing Network Symposium (March 2020).

Press:

- 40+ articles written about my research in 8+ languages featured in venues such as '3Dprint.com', 'TheEngineer.co.uk', 'hackster.io', 'E&T magazine' and 'ACM tech news'.

Community engagement:

- Talks carried out on my research for outreach, such as 'Bristol 3-Minute thesis' competition and Bristol's 2020 'SCEEM PhD conference'.
- Multiple University of Bristol Opendays and Community engagement days.
- Digital outreach to improve accessibility of research to a wider maker community (e.g. 'Instructables' page with 12k+ views).

FUNDING SECURED

- Fully funded EPSRC PhD studentship from University of Bristol, School of Computer Science **(£45,000)**.
- Brigstow seedcorn grant as a researcher on the 'Developing Digital Tattoos' project **(£5,000)**.
- Internal 'idea accelerator' grant for equipment (3D printer) **(£968)**.