Dr Dan Richardson

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Human-computer interaction researcher and software engineer, with extensive experience in leading projects, hosting client-facing interactions, and working in cross-disciplinary teams. I have designed, developed and published mobile and full-stack web applications across multiple technologies with several partner organisations, and am well published in technology design research using participatory methods to engage with stakeholders.

CORE SKILLS -

UX Research: Co-design practices; human-centred design; stakeholder engagement; focus groups; semi-structured interviews; qualitative analysis; findings synthesis and presentation **Design**: Wireframing (e.g. Figma); low and high fidelity prototyping; design workshops; design briefs **Technical**: Full stack web, app, and server development (React.Js, Vue.Js, Node.Js, ASP .Net, Web API, Xamarin, Google Firebase); Git; project management; Agile development

EMPLOYMENT & EXPERIENCE -

Publications, code repositories, app store links and further details available at danrichardson.me

Research Fellow Action Lab, Melbourne; 2020 - Present

Lead researcher on the Paroli project: a web platform which supports mutiple organisations in South Asia to run affordable, COVID-safe engagements through digitally-augmented phone calls (Website). Designed and implemented Paroli through a multi-step process: I designed and ran (or supervised) numerous **stakeholder engagements**, including **design workshops**, **focus groups** and **semi-structured interviews**, conducting **qualitative analysis** on resulting data to produce a **human-centred design**. I led further research and development of Paroli as **project lead** of a small team of researchers and developers, overseeing the design and implementation of additional features and use of the platform in ongoing research. I am currently working with over a dozen organisations in South Asia (including Oxfam in Bangladesh and Caritas Nepal), producing **financial plans** and **technical support** so that they can host the system on a long-term, sustainable basis. I have also: led research and development on a project partnering with VACRO, designing and hosting design workshops to produce **wireframes** and **design briefs** for an application to support prison leavers; worked with the Red Cross through an international volunteer programme, **leading three teams of developers** in an **Agile development** process to fulfill client briefs; was one of the lead organisers & chaired the ACM COMPASS'21 conference; and I designed and ran an engagement programme for offshore students starting university during the pandemic.

Visiting Researcher

International Federation of the Red Cross Red Crescent, Geneva; 2018

I worked in the Innovation Team at the IFRC's Geneva headquarters to contribute to the process and **interaction design** of their consultation tool, TalkFutures. Helped develop its mobile and web platform using Xamarin Android, Xamarin iOS, and Vue.js, and worked alongside their publicity manager to design and support its **worldwide deployment** in six different languages across the Red Cross network. TalkFutures successfully created dialogue regarding the challenges the Federation should prepare for with members from 86 different countries.

Visiting UX Researcher

International Computer Science Institute, Berkeley; 2017

Worked within a small team to develop a user onboarding experience for a MOOC platform; designed and hosted **participant workshops** and **think-aloud walkthroughs** to assess it.

Doctoral Researcher

Open Lab, Newcastle upon Tyne; 2015 - 2020

As a part of my Human-Computer Interaction PhD, I designed and developed *OurPlace*: a mobile app platform which makes it easy to produce, share and experience creative place-based mobile learning activities. As project lead, I developed OurPlace through a **user-centred**, **design-based research** approach: I led **design workshops**, **interviews and deployments** with schools, businesses and volunteer organisations to engage with hundreds of **stakeholders**, including children, officials, professionals and volunteers. Each stakeholder group

had different priorities and agendas which shaped the technology's design and use. I created interfaces with phone and tablet support for both **Android** and **iOS** apps. OurPlace has supported teachers, students and community experts in creating and sharing rich, digital experiences in authentic settings, without the need for large budgets or technical expertise. The app has been used by dozens of community groups and hundreds of students across nine different schools, in contexts ranging from local parks to lighthouses, and from zoos to castles. I also supported one of my partner organisations in securing a \$32,000 grant to finance a staff role dedicated to delivering OurPlace activities.

Research Associate

Culture Lab, Newcastle University, Newcastle upon Tyne; 2014 - 2015

Contributed to several research projects, including: designing and developing Speeching, an **Android** application designed to assist in therapy for people living with Parkinson's; and VoiceBoard, a **high-fidelity prototype** which used a Raspberry Pi and **Python** to provide a peer support platform for people experiencing homelessness. Was the **lead designer** and **full-stack developer** on MySkinSelfie: a Xamarin Forms app with a privacy focus, designed for easily tracking skin conditions over time. The app was successfully deployed within the UK's National Health Service (NHS) for a **usability study**, and I discussed the project live on BBC Radio.

Gameplay Programmer

Lemon Moose Games, Gateshead; 2014

Used server-side technologies and Unity3D to develop a variety of video games in a small team, working to fulfill **client specifications**.

EDUCATION -

PhD in Computing Science (Human-Computer Interaction) Open Lab, Newcastle University; 2016 - 2020

Thesis title: Local Communities as Infrastructure for Place-Based Mobile Learning

Master of Research (Digital Civics)

Newcastle University; 2015 - 2016

Master of Computing Science (Games Engineering)

Newcastle University; 2010 - 2014

ACADEMIA ----

Published on 19+ papers at recognised international venues, multiple of which I wrote and presented as first author. Secured \$50,000 AUD of funding to run *Paroli* studies in Bangladesh.

Up-to-date details and PDFs of papers and my PhD thesis are available at danrichardson.me.

References available upon request.