
GERARD WILKINSON



PROFILE

I am a Software Engineer and PhD Student at Open Lab, Newcastle University, funded by the BBC. I have experience in software development, covering both consumer and corporate technologies, and applications. I have worked with sensing technologies and processing for 4 years, focussing on gestural interaction, activity recognition with time-series data and AI-based media tools. I am a highly motivated individual with a very strong work ethic.

EDUCATION

PHD COMPUTING SCIENCE, NEWCASTLE UNIVERSITY (2015-PRESENT)

- Focussed on the emergence of Object-based Broadcasting experiences, moving away from media as a linear, pre-packaged medium towards more responsive and immersive experiences.
- Fusion of vision, wearable and embedded sensors in production and consumption environments to generate inferences and provide adequate labelling to media with AI.
- Using wrist-worn sensing to investigate gestural control to complement these immersive consumption experiences.
- Open Lab - highest ranked lab in Human Computer Interaction outside of the US.
- TVX '16 PhD Best Paper Award and CHI '18 Honourable Mention Award.

BSC COMPUTING SCIENCE, NEWCASTLE UNIVERSITY, 1ST CLASS (2011-2015)

- School of Computing ranked 1st for research impact in the REF2014 (National Research Excellence Framework).
- Top student in a year of 152 (overall mark of 86%). Highest honours project mark (also published at major international conference, CHI '16) and won the School of Computing Science prize for performance in all three years.
- Awarded a Faculty prize, the British Computer Society prize, and the Netcraft Programming Award.

EXPERIENCE

RESEARCH INTERN, MICROSOFT, REDMOND-WA (SUMMER 2016)

- Researched live streaming applications, event-wide live streaming scenarios and coordination of live streamers pre- and during the event.
- Explored chat message communication at scale (100+ participants) with feedback to a single or multiple streamers (full paper published at ACM CHI '17).

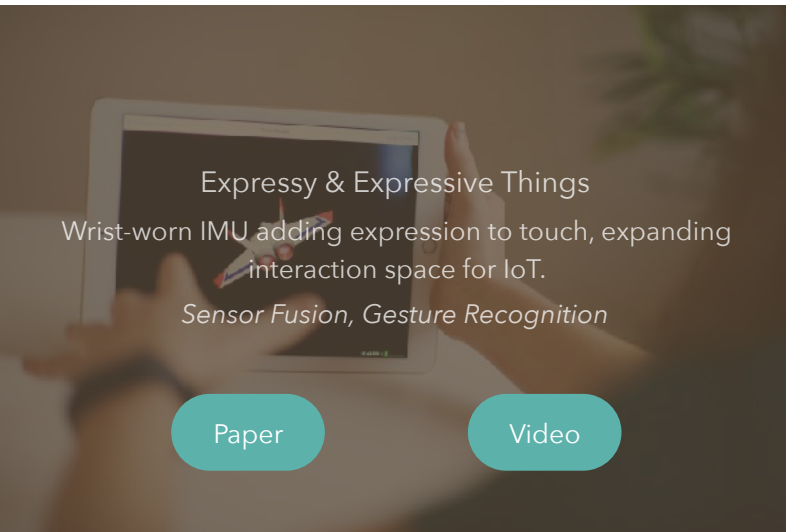
RESEARCH ASSOCIATE, OPEN LAB, NEWCASTLE UNIVERSITY (2014-2015)

- Worked on a range of civic engagement projects.
- Building technologies for deployment with local community groups.

BESPOKE SOFTWARE CONSULTANT, WATERSTONS (2014-2014)

- Undertook an industrial placement year at Waterstons, (IT Consultancy and Microsoft Gold Partner).
- Worked with Microsoft technologies on a range of projects including an asset database for our clients using ASP.NET MVC, Entity Framework, pre-sales and documentation writing.

SELECTED PROJECTS



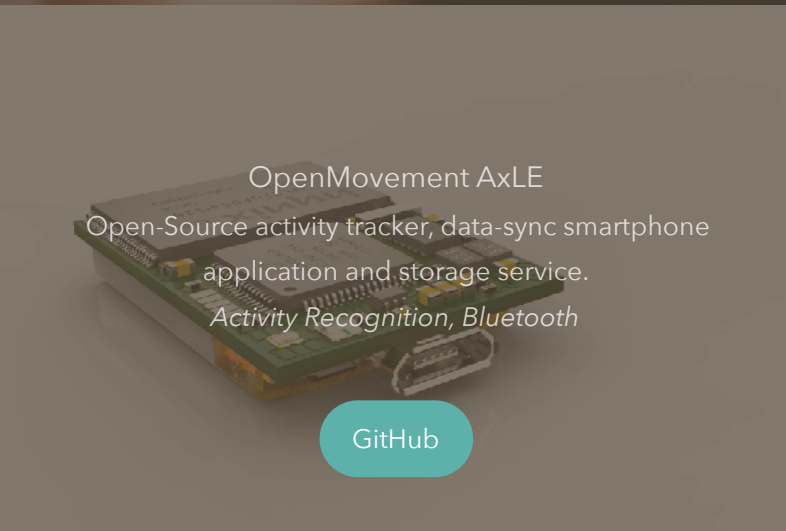
Expressy & Expressive Things
Wrist-worn IMU adding expression to touch, expanding interaction space for IoT.
Sensor Fusion, Gesture Recognition

Paper Video




Media of Things
Media Production, point of capture meta-data generation from embedded sensing.
Sensor Fusion, Activity Recognition, CV, AI

Paper GitHub



OpenMovement AxLE
Open-Source activity tracker, data-sync smartphone application and storage service.
Activity Recognition, Bluetooth

GitHub



Hawk-Eye EDGE-SENSE
Cricket ball edge detection with IMU on bat, for club level cricket.
Sensor Fusion, Activity Recognition

TV Newspaper

SKILLS

- C#, Node.JS, Java, Swift & C++. Working on both native (iOS, Android), cross platform (Xamarin) and desktop development using Visual Studio & Xcode.
- MVC, ASP.NET Web Forms, HTML, CSS & JavaScript. I have used these technologies in combination with server-side technologies such as SQL (both MySQL and MSSQL).
- Microsoft 70-480 HTML5, CSS3 and JavaScript qualification towards an MCSD.

OTHER INTERESTS

I have a keen interest in sport and physical fitness. I am a member of squash and kickboxing clubs. I thoroughly enjoy running and I am a keen road cyclist always challenging myself with marathons and cycling trips around the World.

REFERENCES

Prof. Patrick Olivier, Director of Open Lab, Email: patrick.olivier@newcastle.ac.uk, Address: Open Lab, Urban Sciences Building, Newcastle upon Tyne, NE4 5TG, UK

Mike Evans, UX Research Lead, BBC, Email: michael.evans@bbc.co.uk, Address: BBC R&D Dock House, Media City UK, Salford, M50 2LH, UK