

# Dr DAVID FARRELL

## PERSONAL INFORMATION

*email* david.farrell81@gmail.com  
*phone* +44 (0)7595 393964  
*portfolio* <https://gameologist.com/>

“Making the solution seem so completely inevitable and obvious, so uncontrived and natural – it’s so hard!” - Sir Jony Ive

## KEY SKILLS

Product Ownership; Agile Development; Technology Strategy; Interaction Design; Stakeholder Management; Team Leadership; User Research & Testing; Data Driven Design; System Design

## WORK EXPERIENCE

2009 - present Product & Design Consultancy

*Paidia  
Consulting  
Ltd*

My product consultancy provides a range of services to commercial and public organisations. I have been credited with contributions to 2019’s BAFTA award winning Observation, Scottish BAFTA award winning Stories Untold, and the Channel 4 published app Party Pugs. Recent projects include a service to help decision makers manage non-native invasive species, and a product that helps business leaders explore the consequences of the Living Wage.

Aug 2013 - Feb 2021 Product Owner

*Glasgow  
Caledonian  
University*

As Product Owner, I led the agile development of apps and games on mobile and web platforms for Glasgow Caledonian University with budgets in excess of £2.5m. In the last two years, three projects I launched have won awards at the International Educational Games Awards (Best Mobile Game & 2nd Place Overall in 2019, Advanced Commendation in 2020). My last project for the University (<http://bit.ly/2019LLPT>) mixed evidence based behaviour change science, user centred design, and data driven feedback loops to help teenagers improve their health habits.

Jan 2007 - Jan 2010 Product Manager

*City,  
University of  
London*

I led the product design and development of Serious Games about microbes, hygiene, and antibiotics as part of a large EU project (e-Bug). I managed the development team on this project and worked closely with subject experts, school teachers and pupils to design two educational games, translated and rolled-out to 17 European nations.

2001 - 2007 (Co)Founder & Software Developer

*Paidia Ltd &  
Business  
Playground  
Ltd*

I founded Paidia Ltd to offer bespoke cloud solutions. I led and subcontracted development for clients ranging from magazines and universities to the Scottish Government. I provided full stack services from front-end design to back-end database architecture and web server management. I later co-founded an Educational Game business that provided simulation games for Scottish schools.

## EDUCATION

2020 PhD, Glasgow Caledonian University

*An Adaptive Cognitive Walkthrough Method to Evaluate Serious Game Design*

My PhD focused on the integration of psychological theories with design practice. My main contribution is a novel Human Computer Interaction technique for designers to use when real-world tests are not available.

2005 Pg Dip Informatics, Glasgow Caledonian University

2001 BSc (hons) Computer Science, Strathclyde University

## KEY PROJECTS

	2017-2021	Engaging Adolescents in Changing Behaviour
UK National Institute for Health Research	£2.2m	I led the agile design and development of this complex diet and physical activity intervention. I was responsible for: defining a product strategy; aligning development with stakeholder requirements; defining epics; prioritising the backlog; selecting sprint targets; and translating product goals and design principles to developers. I created novel co-design workshops to elicit requirements and values of young people and used logic models to align these with research theories. I ensured that each feature of the app satisfied the complex requirements of this product and used data to drive iteration and identify next steps. The <b>LifeLab+</b> app we developed won the “Advanced Commendation” award at the 2020 IEGC Competition.
	2019	SUSFANS
EU Horizon	€11k	I was asked to help deliver a novel <b>data visualiser</b> for a Horizon project on sustainability in Europe. I worked with the project team to identify a viable strategy, and successfully led my agile development team to develop and publish the web based interactive tool within one month allowing the original research team to meet their grant obligation.
	2017 - 2018	Gaming Climate Futures
Mellon Foundation	\$180k	Working with political scientists from Purdue University, Utrecht University and Oxford University, we designed an interactive day long futures experience that helps real-world climate negotiators understand the implications of their decisions. I was responsible for leading a team of undergraduate students and staff at Glasgow Caledonian who built the game-like component ( <b>Earth Remembers</b> ) of this mixed media project. The product was featured at the UN Conference of Parties negotiations in Katowice and Bonn and was nominated for an international award.
	2016-2018	LEVEL Project
EU Erasmus +	€230k	I was the Product Lead on this project that aimed to improve the mental maths skills of pupils across Europe. Working with a Serious Games company from Germany and teachers from Germany, Scotland, Portugal, and Greece we created a mobile game ( <b>Enchanted Crystals</b> ) that uses a novel gesture based input system and a Harry Potter style game world to help pupils across Europe practice basic arithmetic. My primary role on the project was ensuring that the product met the disparate needs of teachers and pupils across Europe. We were awarded Best Mobile Game and 2nd Overall Prize at the <b>7th International Educational Games Competition</b> .
	2016-2017	Game On Project
EU Erasmus +	€50k	Working with school teachers across Europe, I helped research and identify best real-world practice for <i>using</i> games in the classroom. We publicised our findings by writing a public-facing book “ <b>Game Based Learning for Teachers</b> ”.

## AWARDS AT THE INTERNATIONAL EDUCATIONAL GAMES COMPETITION

2020	Advanced Commendation for <i>LifeLab+</i>
	The <b>LifeLab+</b> app I led for the “Engaging Adolescents in Changing Behaviour” project won the “Advanced Commendation” award in September 2020. The app is novel in its class for being data driven with analytics being used to support an agile development process.
2019	Best Mobile Game / 2nd Prize Overall for <i>Enchanted Crystals</i>
	The <i>Enchanted Crystals</i> product I led for the LEVEL Project won this prize for solving a real-world problem for multiple stakeholders. Young people enjoy the playful interface method and the fictional setting of the game but teachers enjoy being able to control the difficulty of the lessons in the game.
2019	Finalist for <i>Earth Remembers</i>
	The Gaming Climate Futures negotiation simulation experience was featured at two of the UN Conference of Parties events and was nominated for an award at the IEGC in 2019. This high profile project still receives significant international attention and is expected to feature again at the COP in Glasgow 2021.

## PUBLISHED ARTICLES

### *Journal Articles*

Strömmer, S., Barrett, M., Woods-Townsend, K., Baird, J., Farrell, D., Lord, J., Morrison, L., Shaw, S., Vogel, C., Lawrence, W. and Lovelock, D., 2020. Engaging adolescents in changing behaviour (EACH-B): A study protocol for a cluster randomised controlled trial.

Strömmer S, Lawrence W, Shaw S, Simao SC, Jenner S, Barrett M, Vogel C, Hardy-Johnson P, Farrell D, Woods-Townsend K, Baird J. Behaviour change interventions: getting in touch with individual differences, values and emotions. *Journal of Developmental Origins of Health and Disease*. 2020 Jul 28:1-0.

Rose T, Barker M, Jacob CM, Morrison L, Lawrence W, Strömmer S, Vogel C, Woods-Townsend K, Farrell D, Inskip H, Baird J. A systematic review of digital interventions for improving the diet and physical activity behaviors of adolescents. *Journal of Adolescent Health*. 2017 Dec 1;61(6):669-77.

Farrell D, Moffat DC. Adapting cognitive walkthrough to support game based learning design. *International Journal of Game-Based Learning (IJGBL)*. 2014 Jul 1;4(3):23-34.

Farrell D, Kostkova P, Weinberg J, Lazareck L, Weerasinghe D, Lecky DM, McNulty CA. Computer games to teach hygiene: an evaluation of the e-Bug junior game. *Journal of antimicrobial chemotherapy*. 2011 Jun 1;66(suppl.5):v39-44.

McNulty CA, Lecky DM, Farrell D, Kostkova P, Adriaenssens N, Koprivová Herotová T, Holt J, Touboul P, Merakou K, Koncan R, Olczak-Pienkowska A. Overview of e-Bug: an antibiotic and hygiene educational resource for schools. *Journal of antimicrobial chemotherapy*. 2011 Jun 1;66(suppl.5):v3-12.

de Quincey E, Kostkova P, Jawaheer G, Farrell D, McNulty CA, Weinberg J, e-Bug Working Group, Goossens H, Adriaenssens N, De Corte S, Weinberg J. Evaluating the online activity of users of the e-Bug web site. *Journal of Antimicrobial Chemotherapy*. 2011 Jun 1;66(suppl.5):v45-9.

Lecky DM, McNulty CA, Adriaenssens N, Koprivová Herotová T, Holt J, Touboul P, Merakou K, Koncan R, Farrell D, Brito Avô A, Campos J. What are school children in Europe being taught about hygiene and antibiotic use?. *Journal of antimicrobial chemotherapy*. 2011 Jun 1;66(suppl.5):v13-21.

Lecky DM, McNulty CA, Adriaenssens N, Herotová TK, Holt J, Kostkova P, Merakou K, Farrell D, Olczak-Pienkowska A, Avô AB, Campos J. Development of an educational resource on microbes, hygiene and prudent antibiotic use for junior and senior school children. *Journal of antimicrobial chemotherapy*. 2011 Jun 1;66(suppl.5):v23-31.

### *Conference Articles*

Moffat D, Farrell D, Gardiner B, McCulloch A, Fairlie F. A serious game to give students careers advice, awareness and action. In *ECEL2015-14th European Conference on e-Learning: ECEL2015* 2015 Oct 1 (p. 396). Hatfield, UK: Academic Conferences and Publishing Limited.

Farrell D, Allsop Y, Shabalina O, Grace P, Malliarakis C. Reflections on applying a criteria to evaluate a serious game. *Creativity in intelligent technologies and data science*. 2015 Dec 1:734-47.

Farrell D, Moffat D. Applying the self determination theory of motivation in games based learning. In *European Conference on Games Based Learning 2014 Oct 1* (Vol. 1, p. 118). Academic Conferences International Limited.

Farrell D, Moffat D. Cognitive Walkthrough for Learning Through Game Mechanics. In *European Conference on Games Based Learning 2013* (p. 163). Academic Conferences International Limited.

Weerasinghe D, Lazareck L, Kostkova P, Farrell D. Evaluation of popularity of multi-lingual educational web games–Do all children speak English?. In *International Conference on Electronic Healthcare 2010 Dec 13* (pp. 44-53). Springer, Berlin, Heidelberg.

Kostkova P, Farrell D, de Quincey E, Weinberg JR, Lecky D, McNulty C. eBug-teaching children hygiene principles using educational games. In *MedInfo 2010 Jan 1* (pp. 600-604).