Henry Cooke

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Team lead, researcher, creative technologist.

Glue person, consensus-builder, facilitator. Tinkerer, prototyper, committed generalist. Emerging futurist. Data science lab assistant. AI whisperer.

In over two decades working in creative technology, I've developed a good nose for emerging technologies and how they might be put to use by professionals and the public.

I've made websites, games, 3D environments, toys, mobile and desktop apps, interactive stories, electronics, art installations, many prototypes in and between software and hardware, and in one memorable case building a giant talking throne for a Christmas event in a Royal Palace. I've experimented with digital storytelling, natural language processing, spatial audio, machine learning and made art from edge-cases of speech recognition and computer vision.

I have led successful teams both technical and cross-disciplinary — the latter is where my heart is. I've done a lot of design, concepting, and pitching and I am trained in video & audio production.

Professional skills

Skilled facilitator and workshop leader. Empathetic communicator and consensus-builder. Glue person. Adept at communicating with creative, management, and engineering staff on their own terms and fostering communication between disciplines. Engaging public speaker and precise and thoughtful writer. Trained agile project manager, product owner, and mental health first aider.

Technical skills

Expert in Python and skilled in JavaScript, both client and server-side. Proficient in HTML & CSS, with some C++ (mostly openFrameworks), Java, Processing, and C#.

I can generally pick up whatever stack is most useful for the job at hand.

Former iOS and Flash developer. Happy hacking with web-facing APIs and fluent in JSON, XML, OAuth, REST etc. I know my way around a command line, and frequently tinker with VPSs in various parts of The Cloud. Familiar with AWS, Azure, Heroku, and fly.io. Regularly work with Raspberry Pi, comfortable with Arduino and intermediate electronics. I'm competent with a soldering iron.

I've recently been experimenting with open-source large lanaguage models (LLMs) as co-pilots for research tasks, and have been getting a feel for generative visual AI via Stable Diffusion and ComfyUI.

Career history

An overview of my career and selected projects is available at prehensile.co.uk/timeline

The BBC Research & Development Years 2016 – today

I first worked at BBC R&D in 2014 as a freelance creative techologist, working on experience prototypes for a content analysis, discovery, and recommendation system. I liked it so much that I stuck around, and joined full-time in 2016.

As a producer, I've designed and led prototyping projects to explore emerging interactive media technologies, most notably around voice assistants and spatial audio.

As a technologist, I've built prototypes on my own and other projects to get a practitioner's feel for technologies and their possibilities.

As a researcher, I've <u>published</u> guidelines and papers communicating the findings of our projects, and I've recently been building a practise in futures and foresight based on long-standing research interests.

The Freelance Years

2008 - 2016

In 2008, my instincts were leading me to the iPhone as the next platform where interesting creative work was happening. Over the next few years I worked on freelance projects as a creative technologist in Flash and iOS, including the first app to be nominated for a TV BAFTA and Björk's *Biophilia* 'app album'.

This time was also marked by artistic collaborations. Highlights include work with Dora Garcia and Crystal Bennes, and experimental theatre projects leading to The Body at the Barbican in 2015 — "a seat-shaking, soul-searching technofuturist experience" which won that year's Oxford Samuel Beckett Theatre Trust Award.

Sometimes these threads come together. In 2013, I collaborated on a magical talking throne for a Christmas event at Kensington Palace. In 2019, I investigated technologies to track audiences and create personalised moments during a show with legendary immersive theatre company Punchdrunk.

The Design Agency Years

2004 - 2018

I started my London agency career at Tonic (now defunct) in 2004, where I made Flash microsites. I moved on to Preloaded in 2004, where I continued to build Flash experiences and games. I learned the craft of creative software development during these years, and gained an education in agency-standard visual design.

Highlights include Launchball which eventually racked up over 10 million plays and won a slew of awards including Best in Show and Best Game at SXSWi 2008 and Technical Excellence at Flash in the Can.

Education

BA (Hons) Media Production, University of Lincoln 2001 – 2004

I was already a pretty good coder by the time I left school, and wasn't sure how much I'd get out of a Computer Science degree. I was enjoying making short films and videos, and had an inkling that understanding how traditional media worked would be a useful skill to go alongside the programming I already knew.

The critical theory and production skills I learned at Lincoln have been consistently useful and evolving bits of my toolkit ever since.