interface design for minimal hardware

An intensive, one-day workshop, diving head-first into the design of product interactions.

Switches, knobs, lights and single pixels. You'll learn to design, prototype and experiment with the huge potential for emotional, engaging interactions on physical interfaces.

Run by interaction designer and technologist George Cave, this highly interactive workshop is built around product teardowns, case studies and design exercises. The day culminates in a collaborative design sprint, inventing and testing new interfaces for specially customised Casio F-91W watches.

Specifically designed for UX, product and design teams, explore the world of minimal physical interfaces and discover lessons and approaches that apply across all aspects of design today.

Typical agenda

1. **Physical interface fundamentals**
   Designing around hardware constraints • Context • Mental models • Metaphors • Feedback • Interface organisation approaches • Distributed interfaces • Designing for others

2. **Switches**
   What makes a good switch? • The 4 button use cases • Visual vs. haptic communication • Switch and dial taxonomy • 6+1 codings • Screens vs. buttons

3. **Light**
   Designing with light: colour, brightness and gamma • Branded vs. functional lighting • Expression with a single pixel • 2d light grid design • Light strip opportunities •

4. **Experience prototyping**
   Fidelity • Scale • Context • Ignoring the script • Minimal interface mental models • Prototyping with hardware

The workshop is only available in-person, as there is strong emphasis on hands-on experimentation and practical design exercises.

The format is suitable for a maximum of ~15 attendees, but can be adapted for larger groups if needed.

Who should attend?

This workshop is ideal for designers, engineers and product owners, working both in-house and in design/innovation agencies. Digital UX/UI and product designers especially will gain insights and practical techniques that apply to all aspects of interface development, physical or digital. No software or programming expertise is needed.

About George

George Cave is an interaction technologist and design engineer. As the founder of *Interaction Magic*, he collaborates with agencies and in-house design teams to invent and prototype the future of product interaction.

George is a visiting lecturer at the Copenhagen Institute of Interaction Design, TU Delft and FH Salzburg, and previous conference speaker at IXDA Interaction Week, TEDx, FITC and Ars Electronica.

To book this workshop for your team, contact workshops@interactionmagic.com