

# FACTORY 42

The background image shows a large, dark, industrial interior space, likely a converted factory or warehouse. The ceiling is high and arched, with visible structural beams and pipes. The walls are made of brick and have several large, arched windows. A person in a grey dress is running towards the camera in the center of the frame.

Candidate brief for the position of  
**Senior Programmer**

Somerset House, Strand, London WC24 1LA



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# 1. Our Mission



Factory 42's mission is to change the way people experience entertainment.

Using our creative expertise, relationships and technology we will push the boundaries of storytelling and take consumers to new worlds of enhanced reality.

We know that world class story telling – our core strength – is the single biggest thing that defines our success – no matter what technology is involved. We are building a team of the best technical and creative minds to take advantage of the coming disruption in the TV, film and games sectors to create a new genre.

Using interactive technologies we are developing a multi-sensory approach to narrative and will build unique experiences that engage people's emotions and create presence and empathy.

**We are platform agnostic and for broadcasters, brands, destinations and individuals we deliver premium experiences worth paying for.**

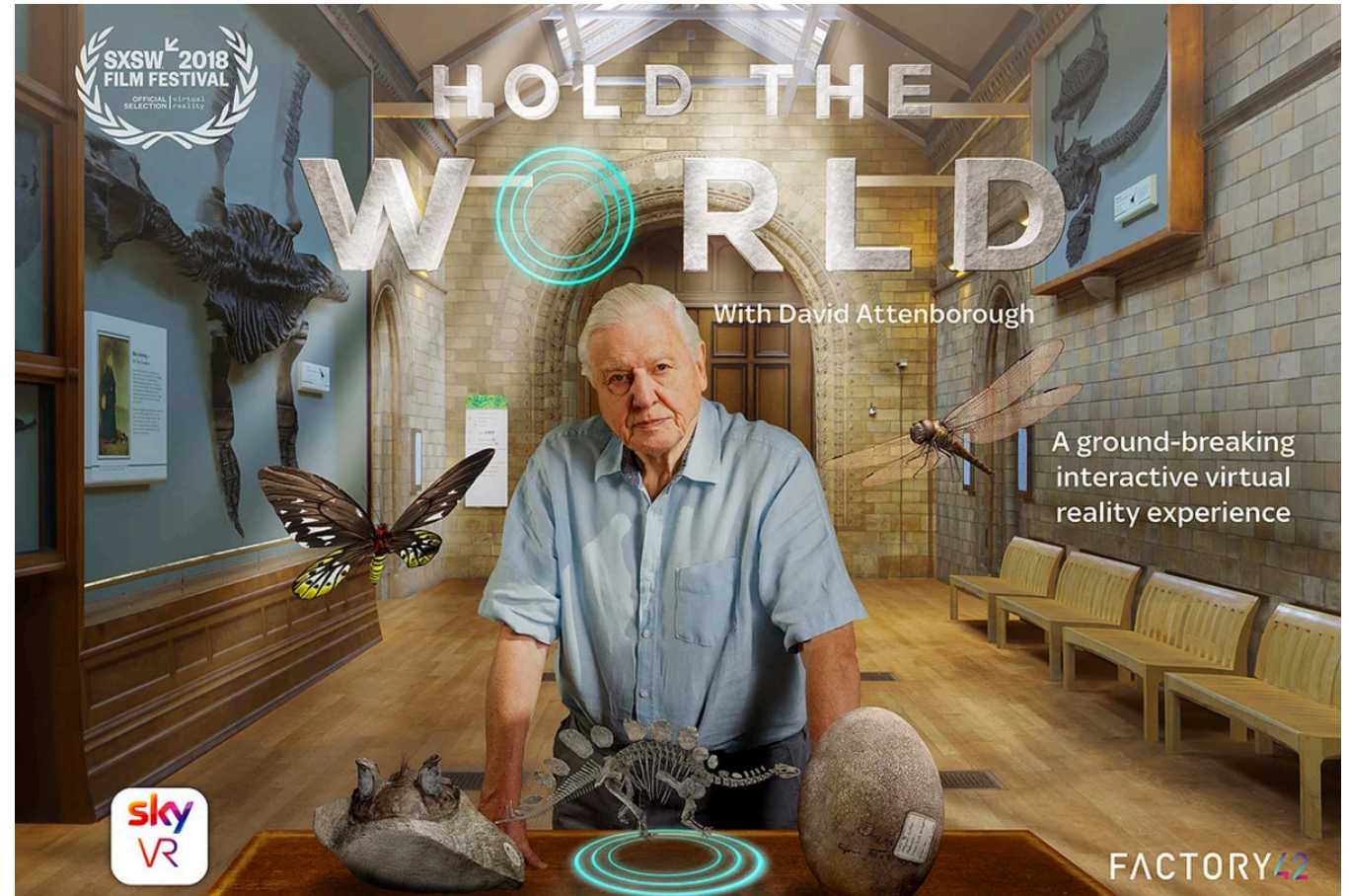
## 2. About Factory 42

Factory 42 is a fast growing next generation production studio creating world class content and experiences at the intersection of film and games.

We are a group of producers, designers, writers, directors, engineers, artists, software developers, architects, academics and neuro-scientists that creates compelling, immersive stories and experiences.

Recent projects include a ground-breaking Sir David Attenborough interactive VR project Hold The World at the Natural History Museum, and a high profile documentary, multiple VR experiences and a major exhibition at the Royal Academy of Arts.

Upcoming work includes Dinosaurs and Robots, two adventure game based mixed reality experiences at two of London's best known museums.



# Recognition for our work

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**WINNER**

# Our Culture



We make content and experiences of the highest possible quality while enjoying what we do because.. well.. life is short.

We are creatively ambitious and brave.

We work hard and deliver to the highest standards. A lot of what we are doing is difficult but we relish solving complicated problems and breaking new creative ground.

We work with the best possible people in their fields, play to our strengths and learn from each other because we are stronger that way.

We all muck in where required and are flexible.

We all take turns to make the tea and do the washing up.

### 3. Our Partners

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## 4. Our Location

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We are based in Somerset House, a former Royal Palace overlooking the River Thames and on the edge of Covent Garden.

Somerset House is home to the largest and most diverse collection of creative organisations, freelancers, artists, makers and thinkers in London.

Our neighbours include the British Fashion Council, the Courtauld Institute of Art and an eclectic range of producers, developers, musicians, dancers, marketeers and artists.

Our first floor high-ceiling and light-filled office overlooks the River Thames, South Bank and Houses of Parliament. Directly below is a river terrace which in summer hosts a tented bar and pizza restaurant.

We have access to bike racks, showers and a snooker room and all staff get a 10-20% discount in the various bars, cafes and restaurants on site.

At Christmas the main courtyard has an ice rink, while in Summer it hosts gigs and the FilmFour season of outdoor film screenings. See video [here](#).



# 5. The Role: Key Responsibilities



- Define and deliver the interactive software for a cutting-edge Mixed Reality and Virtual Reality project, working with a small team of Unity developers, designers and artists.
- Implement software functionality as per communicated design.
- Design, build, and maintain efficient, reusable, and reliable code to time.
- Ensure the best possible performance, quality, and responsiveness of applications.
- Maintain code quality, organization, documentation and any relevant automation.
- Support Lead Programmer in mentoring of junior team members.

# 6. The Role: Knowledge, Skills & Experience



## ESSENTIAL

- Working in a team on video games or other entertainment projects and producing work of an exceptionally high standard.
- Communicating with other team members to establish effective pipelines and integrate media assets.
- Excellent creative problem-solving skills.
- Excellent Unity or Unreal.
- Excellent C# or C++.
- Software Architecture Fundamentals in object-oriented design and data structures.
- Degree in computer science, engineering or mathematics or equivalent professional experience.
- All aspects of game development processes from concept to completion.
- Ability to constantly learn and stay in touch with evolving game standards and development technologies.
- 5+ years' experience as professional programmer.

# 6. The Role: Knowledge, Skills & Experience (cont.)



## DESIRABLE

- Shipped an AAA title.
- Multiplayers programming.
- Profiling and optimization.
- VR/AR/MR.
- Creative problem-solving skills.
- Creating a launch title for a games consoles or a mobile.
- Familiarity with software version control.
- OpenGL or similar API.
- Python.
- Realtime shaders and effects coding.
- Agile/Scrum.
- Creating tools and/or plug-ins for pipeline improvement (in Maya for instance).
- 3D computer graphics application (Maya, Houdini, 3DS Max, ...).