

Research Engineer – Computer Vision AR**The Company**

Smart software for creative people.

We make smart software for creative people.

The Foundry is not just a technology maker or a software seller; we are here to empower artists and designers across the world by enhancing their creative potential. We seek to create a world where people can continually raise their creative potential and to champion creative people by developing tools, technologies and processes that empower them to bring their ideas to life, more quickly and effectively.

We believe in:

- Constantly challenging things
- Always being approachable
- Being committed partners
- Endless enthusiasm!

Our technology portfolio is as creative as it is technical, packed full of ground-breaking, award-winning techy goodness that will have even the most demanding organization salivating!

We are a little bit proud of what we achieve at The Foundry and want to take you on our journey with us.

The Role

We have an exciting new role for a Research Engineer to work on creating Cinematic Augmented Reality (AR) experiences for devices such as Google Tango, Microsoft HoloLens and future devices such as Magic Leap. You will work initially on a funded research project in partnership with a leading visual effects facility, connecting film assets into an AR experience in structured environments. There are key areas of technology that are required to create high quality mixed reality experiences: capture and structuring physical environments as interactive spaces, capture of lighting and physically correct rendering of digital elements, and machine intelligence to recognize scene elements for interaction.

This role will work side-by-side with software engineers building real-time experiences on game engine platforms, and reports to the Head of Research as part of the Research Team at The Foundry. We are looking for candidates with a strong track record in computer vision or computer graphics, a desire to build real-world solutions for artists in the film and visual effects industries, and in depth experience in developing algorithms in C++. Applicants should demonstrate a strong understanding of the problem domain and a proven track record in delivering high quality outcomes.

Research Engineer Responsibilities

- Technical expertise:
 - Develop an in-depth knowledge in a core area of expertise in the field of image, video and geometry processing
- Algorithmic development:
 - Review and investigate state-of-the-art tools and academic work to define potential solutions to algorithmic problems
 - Develop and review algorithmic solutions, create early prototypes as proof-of-concept and beta tools to gather feedback from clients
- Software development:
 - Contribute to the development of the code base for image, video and geometry processing across one or more products
 - Support the specification of features, requirements and scheduling for software development work
 - Fix bugs and deliver final solutions as part of the software life-cycle for technology prototypes and product releases
- External partnerships:
 - Play an active role in communicating with and visiting customers or academic partners to understand and share requirements and proposed solutions

The Requirements

- A PhD in Computer Vision, Computer Graphics or Image Processing
- Recent experience in image or video processing, computer vision or computer graphics, with an emphasis on 3D scene capture, representation, structure, understanding and rendering
- A strong record of international publication in top-tier conferences and journals or the equivalent relevant outcomes and awards for industry products
- Proven experience in C / C++ software development with an industry focus
- Proven experience in creative problem solving, algorithmic design and the ability to turn complex algorithms into software tools
- Excellent mathematical skills, with an organised and methodical approach, highly self-motivated and able to work independently with minimal supervision
- Excellent communication skills with good spoken and written English
- A genuine interest in the VFX industry and film with an appreciation and desire to work on cutting edge creative software in the visual effects industry

Applying

If you meet the criteria, are eligible to work and are interested, please send your covering letter, CV, salary expectations and notice period to jobs@thefoundry.co.uk with the subject "Research Engineer – Computer Vision AR".

More About Us

The Foundry designs creative software technologies used to deliver remarkable visual effects and 3D content for the design, visualisation and entertainment industries. The Foundry's software advances the art and technology of visual experience in partnership with creative leaders across the globe. It enables clients like Pixar, Mercedes-Benz, Google, ILM, Weta Digital, Blizzard, The Moving Picture Company and Sony Pictures Imageworks to turn incredible ideas into reality by solving complex creative challenges.

The company was founded in 1996 and is headquartered in London, with 300 staff based across offices in Silicon Valley, Los Angeles, Shanghai, Austin and the UK. The Foundry consistently invests in R&D to provide more efficient ways for its clients to bring visual concepts to life.

In 2015, the London Stock Exchange named The Foundry one of its "1000 Companies to Inspire Britain." It regularly features in The Sunday Times' Tech Track as one of Britain's fastest-growing private technology companies, most recently in 2016 when it also won the Excellence in Service Award at the International Track 200 awards. Every single film nominated for the Academy Award for Best Visual Effects in the last five years was made using The Foundry's software.

The company was acquired by HgCapital in 2015.

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