

## About BV

Broadcast Virtual is the world leader in Virtual Advertising. We enable real time insertion of virtual branding on any type of sporting event, using in-house developed technologies and algorithms. The business was founded in 2014 and has grown to include all of the major sporting bodies across Australia and New Zealand. Our technology is used at over a thousand live sporting events annually across the globe.

We are a fast growing team with offices in Sydney and Brisbane and are looking to expand the software development and research team.

## The opportunity

Love to experiment, tinker, problem solve and have a proven track record of research?

Want to be part of the decisions that directly shape the future of the technology that drives our success?

We're after a talented individual to join our R&D team based in Marrickville, Sydney.

You'll be supported by an experienced, technical and highly motivated team with plenty of opportunity for future growth wherever that takes you.

We have many areas of active work and research. The main areas of on-going research are:

- Computer vision - camera and object tracking, self calibration
- Segmentation and tracking - players, balls
- Realistic lighting - providing realistic integration of virtual content under changing lighting conditions

Robustly processing broadcast quality video in real time, coupled with working in a live broadcast environment provides many interesting challenges to get stuck into. Algorithms need to be robust, user interfaces need to be just right and up-time is paramount.

We've solved a lot of technical challenges already but there are plenty left to be solved by the right person.

We provide flexible working and there will be the opportunity to travel both domestically and internationally (once the world gets back to normal), to work on some of the largest sporting events in the world.

## **The Role**

Research and Development Programmer based in Marrickville, Sydney.

You will be joining a high-performing team who work within the on-going research, development and maintenance of our in-house graphics engine (Ember). Built using modern C++, OpenGL, CUDA, Qt5 and QML all running on the latest Nvidia hardware.

## **Key Responsibilities**

- Researching new techniques and algorithms
- Adapting existing algorithms and research to our problem space
- Delivering robust real world solutions that drive our technology forward
- Taking an iterative approach to solving large problems
- On-going development, research and maintenance of our in-house graphics software using as necessary C++, CUDA, Qt5, QML and OpenGL
- Setting up and operating our software at live sporting events

## **Skill / Experience / Requirements**

- Masters/PhD in a relevant subject (Computer Science or similar) combined with at least 2 years of industry experience
- Strong interpersonal skills and problem-solving abilities
- Experience of general purpose GPU programming (CUDA, OpenCL)

## **Desirable**

- Modern C++ (C++11 etc)
- OpenGL / Vulkan / DirectX

Email your resume to [jobs@broadcastvirtual.com](mailto:jobs@broadcastvirtual.com)