

# GEOMERICS

□ For fans of computer games around the world, availability of true film-quality visuals is a 'Holy Grail'. Meeting this need, Geomerics' new geometric algebra technology targets a \$600 million global gaming development tools market. It also has significant potential for other applications – notably the electromagnetic modelling market.

## □ AT A GLANCE

- Established by ANGLE in 2005
- Intellectual property developed at the University of Cambridge, UK, and in the USA
- Applicability in both the computer graphics and electromagnetic modelling markets

## □ CONTACT DETAILS

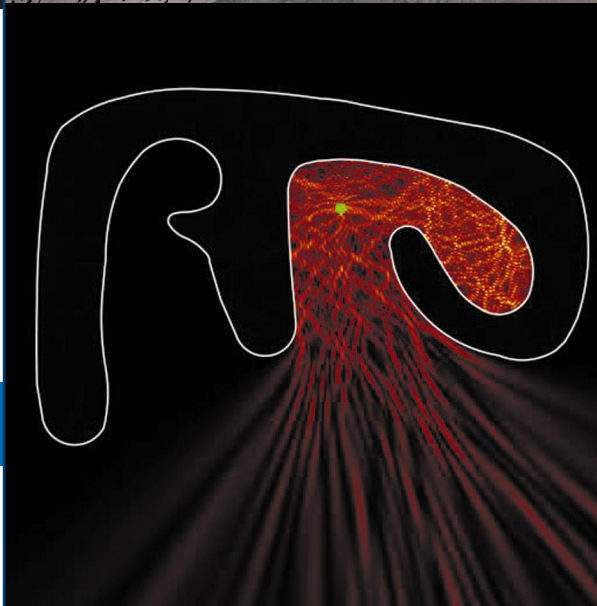
Geomerics Ltd  
Sheraton House  
Castle Park  
Cambridge  
CB3 0AX

T: +44 (0)1223-370030  
F: +44 (0)1223-370040  
E: info@geomerics.com  
www.geomerics.com

## □ ABOUT ANGLE

Founded in 1994, ANGLE is an international Consulting, Management and Ventures company focusing on the commercialisation of technology and the development of technology-based industry.

ANGLE Ventures funds, develops and operates its own technology-based businesses. Utilising our in-house Progeny® process, we commercialise intellectual property developed by technology partners in the academic, private and public sectors.



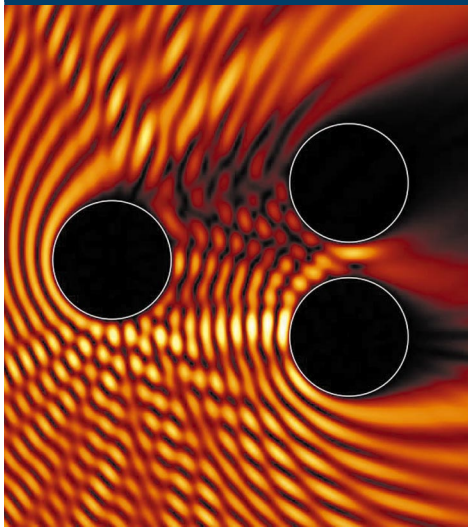
Computer gaming is one of the most vibrant and fastest growing consumer industries. Among critical success factors the industry's focus on the player's viewing experience has already driven performance light years beyond the red and blue 3D glasses of decades ago. Yet the quest for further improvement – to reach film-quality – continues.

The reward for reaching this grail is a development tools market currently worth around \$600 million. And Geomerics is arguably the most promising contender.

The firm was established by ANGLE in May 2005 to exploit the patented geometric algebra IP of US-based Prof David Hestenes and a team of leading academics from the University of Cambridge. This sophisticated form of mathematics vastly simplifies complex geometric operations such as depicting moving light and shadows in computer games.

For a game to flow, the computer has to solve problems of geometry in real time as the player's character moves through the scene. Geomerics' technology performs these calculations much faster than previously possible. It thereby transforms the viewer's experience in terms of both picture quality and game speed.





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## MARKET SCOPE, OPPORTUNITY AND APPLICATIONS

Geometric algebra was originated in the 1960s and initially applied exclusively to theoretical physics. Geomerics' adaptation and application to computer games allows existing effects to become more sophisticated while opening the door to new techniques.

Geomerics' goal is that its technology should define a new graphics standard for the computer game industry. Supporting this objective, it is working to influence current chip design and so 'hard-wire' itself successfully into the future evolution of the market as a whole. The company is also currently working to secure partnerships with computer game developers.

Beyond gaming, whatever its format, Geomerics is also targeting the electromagnetic modelling (EMM) industry, by offering a significantly more accurate solution than currently available from any competitor. Geomerics also provides expert consultancy and foresees future development of its own patented EMM package.

## GEOMERICS AND ANGLE

Geomerics constitutes a further major application of ANGLE's Progeny® process which is designed to help companies commercialise intellectual property. ANGLE itself is a category pioneer, leader and expert in technology wealth creation (TWC). Spanning the worlds of technology, finance and management, it applies this core expertise in three ways to:

- Enable companies to participate effectively in TWC (Management Services);
- Help firms decide how to optimise and progress the value of their engagement in TWC (Consulting); and finally, as with Geomerics, to
- Deliver direct results from TWC (Ventures).

ANGLE is working closely with Geomerics to ensure that its combination of technology, finance and management delivers a fully-integrated – and robustly-tested – platform for Geomerics' current development and future expansion into multiple markets.

## GEOMERICS MANAGEMENT TEAM

**Chris Doran**  
CEO

Dr Chris Doran is a leading research scientist with over 15 years experience in applied mathematics and theoretical physics. He is the author of a major book on geometry and physics and of over 50 papers on subjects including quantum theory, gravitation, and computational geometry. Chris is also an experienced consultant and regular speaker at major international conferences. Chris was an EPSRC Advanced Fellow from 1999 to 2004 and is Director of Studies for Sidney Sussex College, Cambridge. In 2003 he was a finalist in the Joint Research Council Business Plan competition, and was made a Royal Society of Edinburgh Enterprise Fellow in 2004.

**Julian Davis**  
CTO

Until recently Julian Davis was Technical Director of Kuju Entertainment, one of Europe's largest independent game developers. There, Julian spent 10 years driving the development of Kuju's game technology and overseeing the creation of more than 25 games. Julian has been a major contributor to the Microsoft graphics steering group (Graphics Advisory Board) and the Xbox Advisory Board. Julian graduated from the University of Sussex in 1989, and has also worked in operating system development.

