Computer Graphics

Lecture 1: Introduction and Course Organisation

Kartic Subr
Important Looking Pirates VFX

Special Effects

Video Games (real-time)

Google Stadia tech demo 2019
Autonomous Interaction
CG is central to the creative industries

The UK Creative Economy 2018

JOBS
The Creative Economy 2018
3.2 MILLION JOBS
1 IN 11
81k
CREATIVE ECONOMY JOBS ADDED IN 2018

EMPLOYMENT
Employment in the UK creative economy 2018
954,000 Non-creative/support jobs within the creative industries
1,086,000 Creative occupations within the creative industries
1,162,000 Creative occupations outside the creative industries

Total 3.2m jobs in the UK creative economy
creative economy = A + B + C
creative industries = A + B

REGIONS
Numbers of creative industries jobs in region 2018
Figures rounded to (000's)

Source: DCMS statistics, June 2019

www.thecreativeindustries.co.uk
It’s all happening in London now!


OSCAR NOMINEES, 2019-20

<table>
<thead>
<tr>
<th>VISUAL EFFECTS</th>
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<tr>
<td><strong>Avengers: Infinity War</strong></td>
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<tr>
<td>Dan DeLeeuw, Kelly Port,…</td>
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<td><a href="#">VIEW TRAILER</a></td>
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<tr>
<td><strong>Christopher Robin</strong></td>
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<td>Christopher Lawrence, Michael…</td>
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<td><strong>First Man</strong></td>
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<td>Paul Lambert, Ian Hunter,…</td>
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<td><strong>Ready Player One</strong></td>
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<td>Roger Guyett, Grady Cofer,…</td>
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<td><a href="#">VIEW TRAILER</a></td>
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<td><strong>Solo: A Star Wars Story</strong></td>
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<td>Rob Bredow, Patrick Tubach,…</td>
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Simulating photorealistic pictures?

- Photograph: Colourbox.com
- Manually painted: Pedro Campos
- Computer generated
Physically based simulation, at its core!

Projective geometry

Energy (light transport)
Simulate the physics of light
About the course …

Exam time!

https://prezi.com/view/fgJVmBlMT9RVpE7JzKZz/