USC Institute for Creative Technologies

Artificial Intelligence and the Creative Industry

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Executive Director

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Los Angeles – Creative Capital of World

759,000 creative industry workers in LA Region   **2017**

1 in 8 jobs (direct, indirect, induced)

$190B industry

Entertainment, Fashion, Publishing

LAEDC Prepared for Otis College of Art and Design by the Los Angeles County Economic Development Corporation.

Cost of Visual Effects

xtranormal: $100/minute

Next Media: ~$5,000/minute

Cutting-edge video game: ~$20,000/minute

Movies: $1,000,000/minute ~$30 million for 30 minutes

Digital Faces Require Manual Labor

A look at the steps required of an expert's time and skill to produce even a single non-animated pose
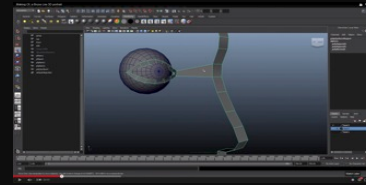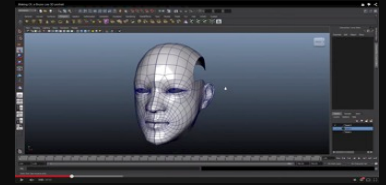
Find Reference Art

Sculpt Base

Create Topology

Form Head
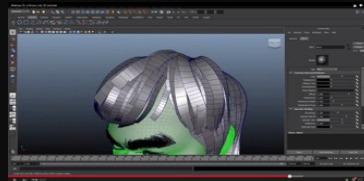
Sculpt Facial Features

Model Head

Texture Skin

Create Hair

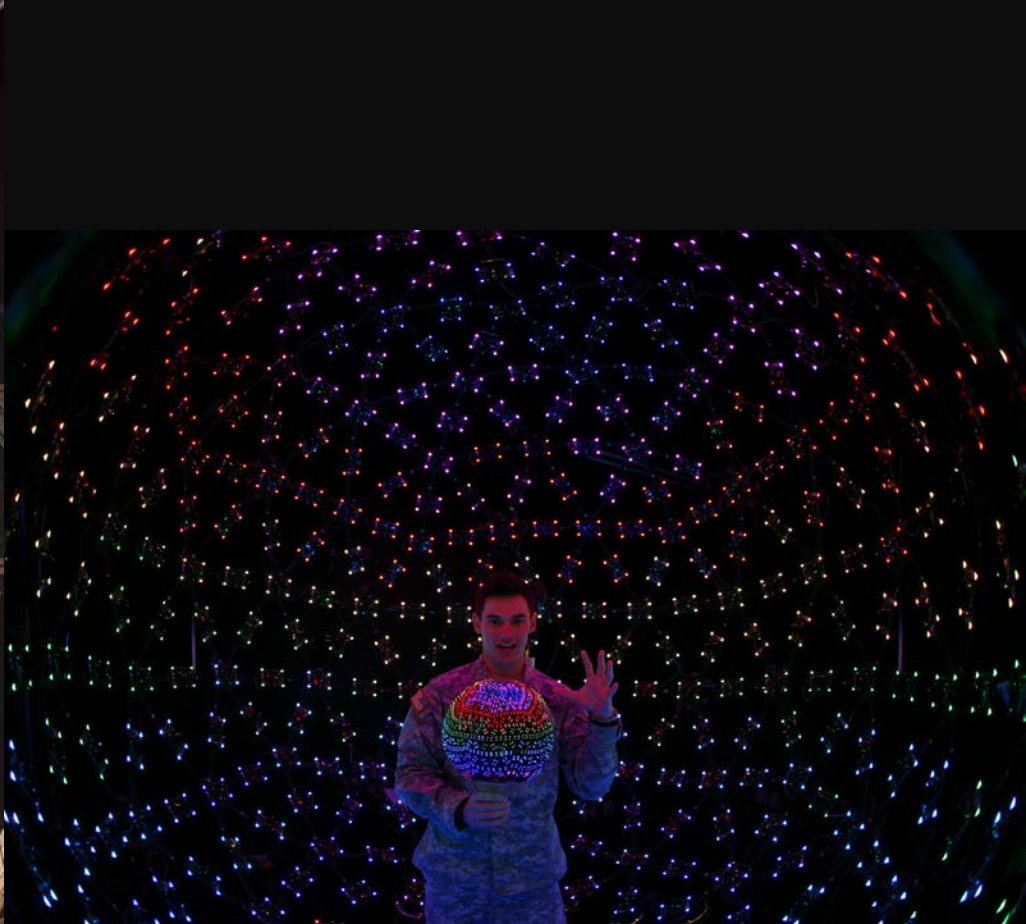Add Eyelashes

Style Hair

Create Eyeballs

Completed Face

Automating the digital pipeline

James Cameron's *Avatar (2009)*
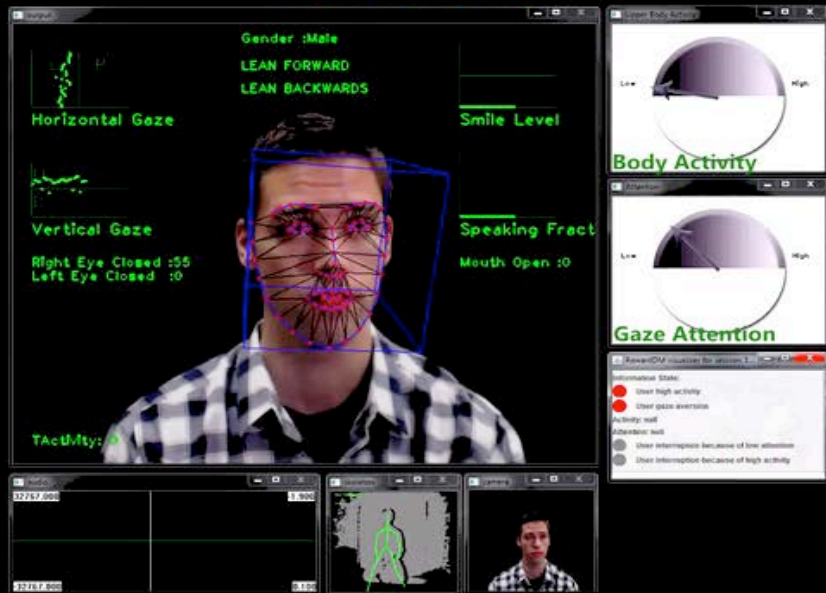

Zoe Saldana

Graphics + Machine Learning

input 2D image   output textured 3D face (AFW)

Graphics + AI: Virtual social worker

Technical skills

The 25 Most Wanted New-Grad Skills in 2017 Tech

1	Python	14	Android
2	C++	15	Latex
3	Java	16	VHDL
4	Algorithms	17	Git
5	Matlab	18	SQL
6	Verilog	19	VLSI
7	JavaScript	20	MySQL
8	Linux	21	Caffe
9	HTML	22	SML
10	Gem5	23	PHP
11	CSS	24	MIPS
12	Virtuoso	25	Ruby
13	Cadence		

HiringSolved

Critical thinking



Harvard Business Review

EDUCATION

Liberal Arts in the Data Age

by JM Olejarz

FROM THE JULY–AUGUST 2017 ISSUE

SAVE   SHARE   COMMENT 2   TEXT SIZE   PRINT

Sensemaking, by strategy consultant Christian Madsbjerg, picks up the thread from Morson and Schapiro and carries it back to Hartley. Madsbjerg argues that unless companies take pains to understand the human beings represented in their data sets, they risk losing touch with the markets they're serving. He says the deep cultural knowledge businesses need comes not from numbers-driven market research but from a humanities-driven study of texts, languages, and people.
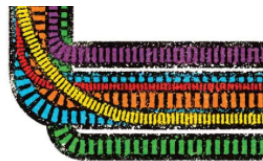
"Quite a lot." From Silicon Valley to the Pentagon, people are beginning to realize that to effectively tackle today's biggest social and technological challenges, we need to think critically about their human context— something humanities graduates happen to be well trained to do. Call it the revenge of the film, history, and philosophy nerds.

ALEXEI VELLA

Creativity

Psychology Today

Mark Batey Ph.D.
Working Creativity

Is Creativity the Number 1 Skill for the 21st Century?

Creativity is the essential skillset for the future

Posted Feb 07, 2011

👍 Like 659

SHARE   TWEET   EMAIL   MORE

Against a backdrop of uncertainty, economic turmoil and unprecedented change a new picture is emerging of the skills and traits for success (and perhaps even simply survival) in the modern era. At the heart of this essential skillset for the future lies... creativity.

Source:

A raft of recent research studies demonstrates that creativity is vital from the shopfloor to the boardroom and at the level of the individual to the organization as a whole. What is more... our economic fortunes at a societal level probably rest on creativity too.

Below are 7 (magnificent!) themes and some research studies that convinced me. I wonder if they will convince you of the cruciality of creativity too.

1 - Creativity and innovation are the number 1 strategic priorities for organizations the world over

USC Institute for Creative Technologies

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ARL

Backup Slides

USC accepts transfer students

Last year:

1505 transfers from 350 colleges

800 transfers from community colleges

27% acceptance of transfer applicants

Scholarship assistance

3.7 GPA

High rate of graduation success

TransferMation workshops

Most private colleges take very few transfers. At USC, about 1,500 get a spot each year

USC student Xavier Garcia transferred from Sacramento City College and is the first in his family to attend college. (Gina Ferazzi / Los Angeles Times)

By Rosanna Xia · Contact Reporter

JUNE 5, 2017, 4:00 AM

Universities supplying Silicon Valley

The 25 Most Wanted Alumni in 2017 Tech (Overall)

Top alma maters were determined by volume of hires made by the top 25 Silicon Valley companies in the past year.

1. University of California, Berkeley
2. Stanford University
3. Carnegie Mellon University
4. University of Southern California
5. The University of Texas at Austin
6. Georgia Institute of Technology
7. University of Illinois at Urbana-Champaign
8. San Jose State University
9. University of California, San Diego
10. Arizona State University
11. University of Michigan
12. University of California, Los Angeles
13. North Carolina State University
14. California Polytechnic State University-San Luis Obispo
15. Cornell University
16. University of Waterloo
17. Texas A&M University
18. University of Washington
19. Purdue University
20. Massachusetts Institute of Technology
21. Santa Clara University
22. University of Phoenix
23. University of California, Santa Barbara
24. University of California, Davis
25. Penn State University

HiringSolved

Student involvement at ICT
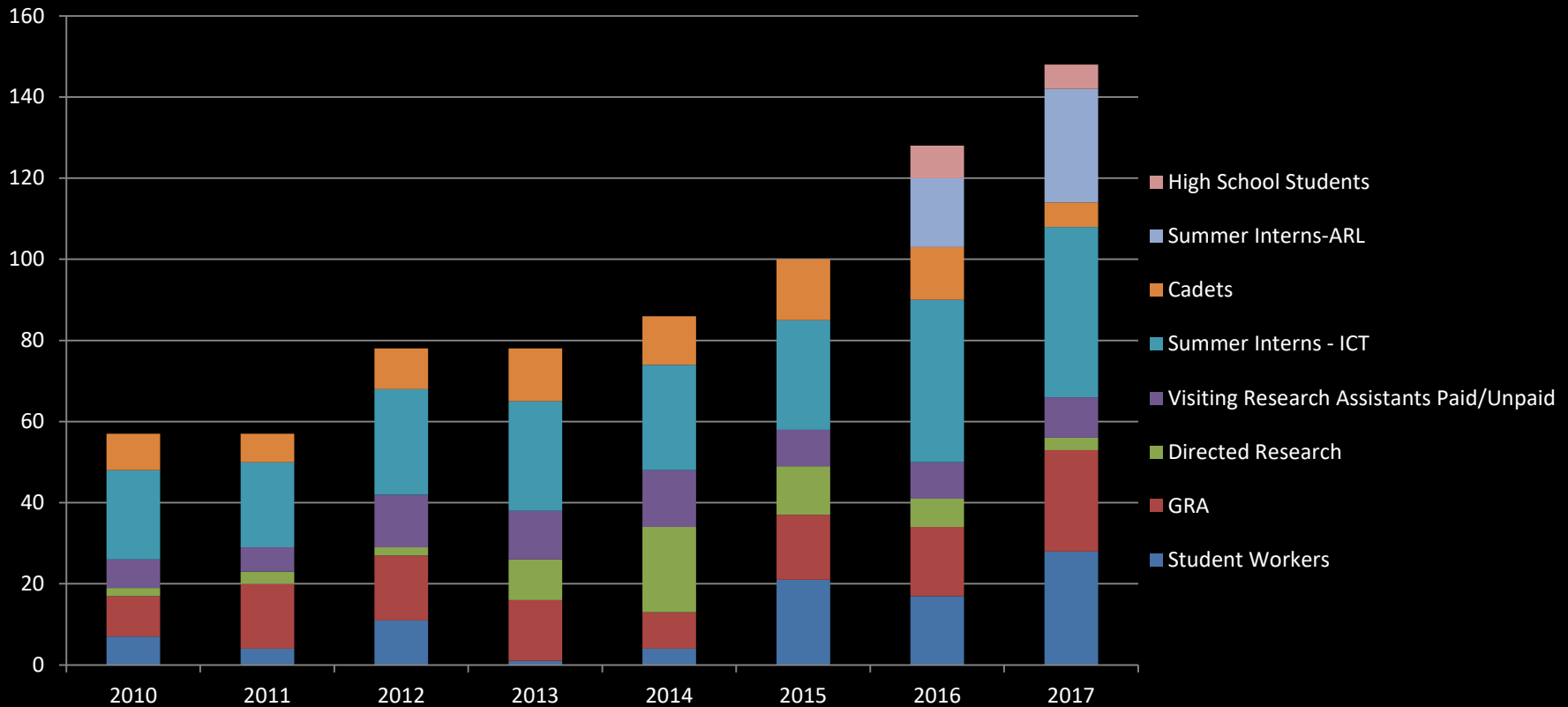
USC Approach

- Engineering+
    - AI, Machine Learning and Data Sciences are revolutionizing research, education and the engineering pipeline
    - Underpins convergence research