

Histories of Computer Graphics: *A Journey through Imagination*

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Happy Hour

Time 4 Fun

- 5a @ 5:00



Trailer

Know Your Past ...

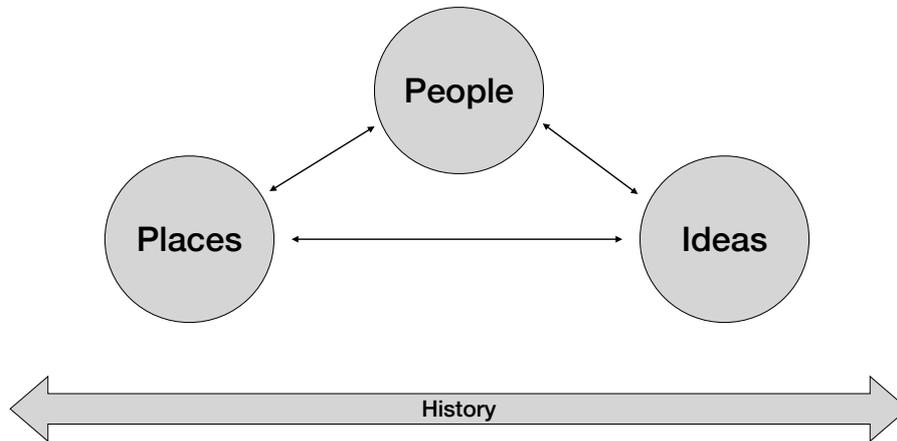
- “Ainda Estou Aqui”, 2024



Our Feature Film

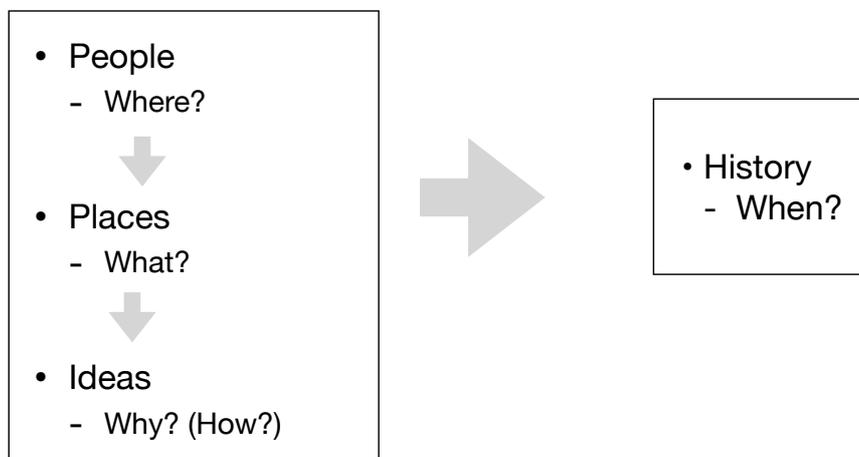
Overview

- The Setting



Solving the Puzzle

- How to Fit the Pieces Together?



Seeing The Light

- What about (Key) Ideas?
- Basic Principle:
 - Keep it Simple!
- Occan's Razor
 - Not Too Simple
 - Not Complicated
 - Just Simple ...



ACM SIGGRAPH

- Mothership

The screenshot shows the ACM SIGGRAPH website. At the top, there is a navigation bar with the logo and links for 'About', 'Awards', 'Events', 'Inside SIGGRAPH', and 'SIGGRAPH 365'. The main heading reads 'ACM SIGGRAPH' followed by the tagline 'Your global community for innovation and application'. Below this, a paragraph describes the organization as a global nonprofit serving the evolution of computer graphics and interactive techniques. A red 'Join Us' button is located in the bottom right corner of the main content area.

Steven Anson Coons Award

- The Fields Medal of Computer Graphics

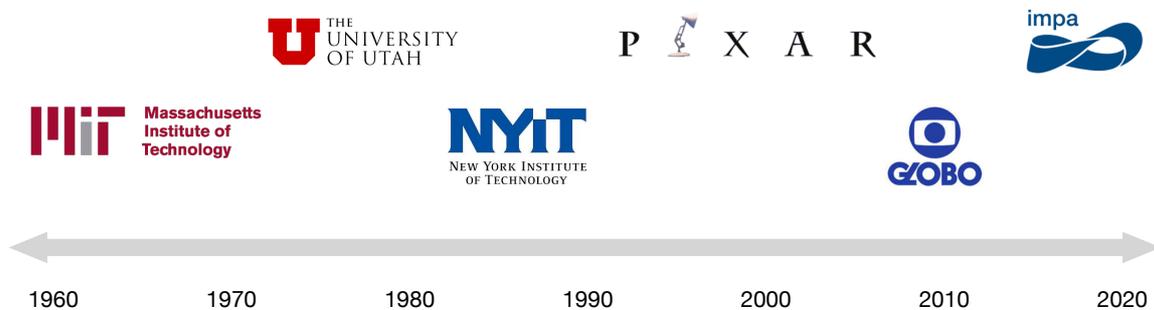
The Steven A. Coons award for outstanding creative contributions to computer graphics is presented in odd-numbered years to honor an individual who has made a lifetime contribution to computer graphics and interactive techniques. The award includes a \$6,000 cash prize and a specially commissioned statue.

- Recipients

- | | | | |
|----------------------------|-----------------------------|-------------------------|-------------------------|
| • 1991 Andries van Dam | • 2001 Lance J. Williams | • 2011 James T. Kajiya | • 2021 Markus Gross |
| • 1989 David C. Evans | • 1999 James F. Blinn | • 2009 Robert L. Cook | • 2019 Michael F. Cohen |
| • 1987 Donald P. Greenberg | • 1997 James Foley | • 2007 Nelson Max | • 2017 Jessica Hodgins |
| • 1985 Pierre Bézier | • 1995 José Luis Encarnaç o | • 2005 Tomoyuki Nishita | • 2015 Henry Fuchs |
| • 1983 Ivan E. Sutherland | • 1993 Ed Catmull | • 2003 Pat Hanrahan | • 2013 Turner Whitted |

The Graphics (Re)volution

- Time & Place



We, The People

- Ivan Sutherland
- Pierre Bezier
- Ed Catmull
- Jim Blinn
- Martin Newell
- John Warnock
- Henri Gouraud
- Bui Tui Phong
- Jim Clark
- Lance Williams
- Pat Hanharan
- Rob Cook
- Jim Kajiya
- Turner Whitted
- Alan Kay

Homework

- Who are They?
- Wikipedia



- Today!
=> for next class

Course Matters

Game Plan

- On Your Own
 - Start Making the Connections
 - Put Pieces Together
 - Explore the Web
 - Imagine!
- We Will do It Together
 - Every Week
 - Come Prepared
 - Contribute



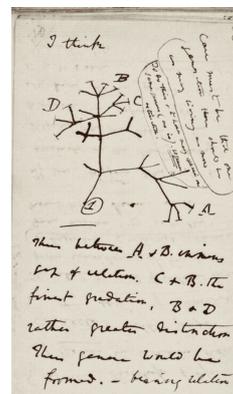
Encounters of the 1st Kind

Training Program

- Class Actions
 - Expository (30 - 45 min.)
 - Instructor
 - Brainstorming (30 - 45 min.)
 - Everybody
- To Do List
 - Required
 - Read the Docs!
 - Optional
 - Watch Videos
 - Extra
 - Surprize Me...

Evaluation

- Keep a Diary of Your Journey
 - e.g., Charles Darwin's Beagle Diary
- Write a Summary Report
 - What you Learned
- Evaluate Yourself
 - Self-Grading



Just to Get the Ball Rolling

Going Places

First Part of Journey

- Massachusetts Institute of Technology
 - Early Days
- University of Utah
 - Camelot Era
- New York Institute of Technology
 - The Works
- PIXAR
 - Showtime
- Globograph / IMPA
 - Then and Now

The Magic of Graphics

What is Computer Graphics?

- The Basics
 - Modeling
 - Rendering
- and More ...
 - Animation
 - Interaction
 - Etc.

Opening the Pandora's Box

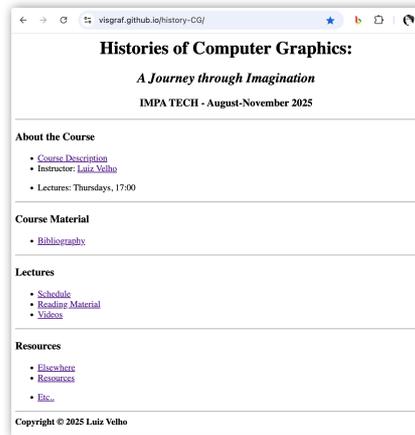
Second Part of Journey

- Scene Creation
 - Modeling
 - Animation
- Rendering
 - Clipping
 - Rasterization
 - Visibility
 - Shading
 - Illumination
 - Mapping

The Devil is in the Details!

Headquarters

- Website on Github



<https://visgraf.github.io/history-CG/>

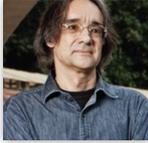
Fireside Chat

- Let's Talk



Watch @ Home

- Luiz Velho, 60 - Memórias e reflexões



being @ the right place & right time

- Celebrating Ivan Sutherland's 1968 Head-Mounted 3D Display



having a vision & make it happen



“Looking forward to seeing you soon!”

-Luiz Velho