

DES 420 Professional Practice Project I

DES 420/DES 421 Mobile App Design / Development

Electronic Visualization Laboratory (EVL)
Engineering Research Facility (EFR)
842 W Taylor St

- 2036 CAVE2
- 2068 Cyber-Commons

Curriculum

- Development of new mobile apps
- Defined by a professional client

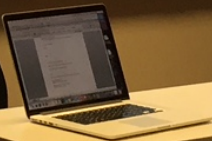
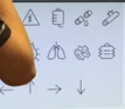
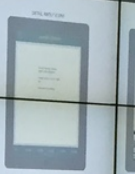
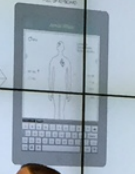
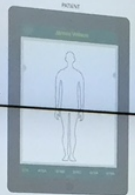
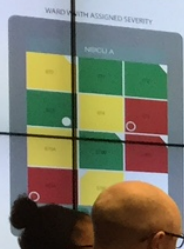
- Work in teams
- Year-long (Fall + Spring)
- Research + design + development process



http://bit.do/evl1

WARD

NICU A	
001	002
003	004
005	006
007	008
009	010
011	012
013	014
015	016



Curriculum

Mobile App design

Research – client /app environment

user interface design

Interactivity

User Experience (UX)

Storyboard design

Web-based apps

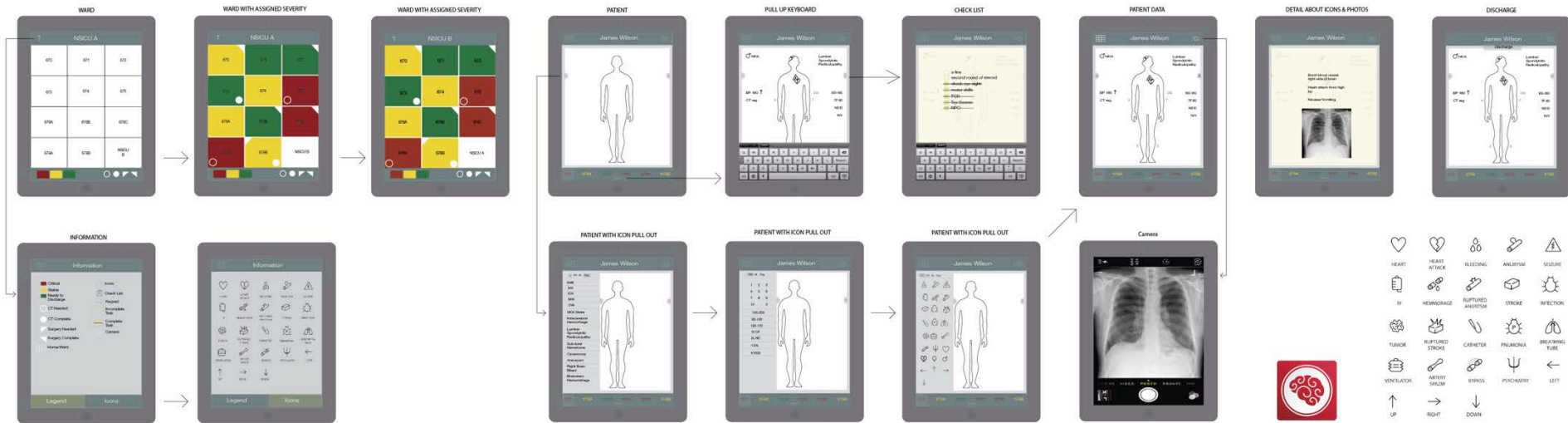
Multimedia

Mobile media technologies overview

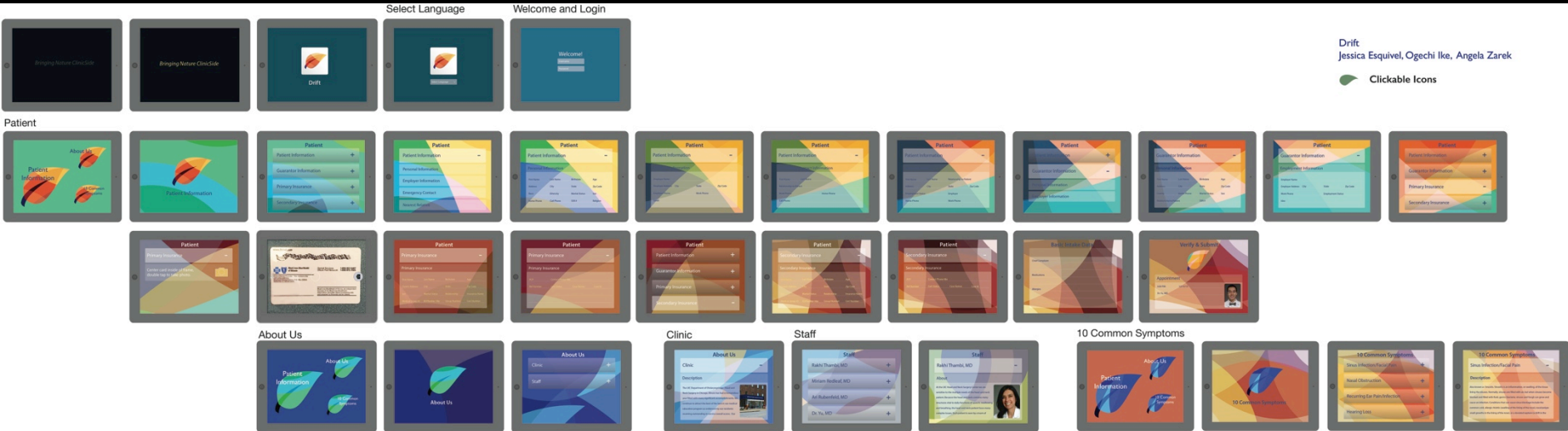
Students learn

design and implement innovative new mobile concepts,
conduct market and user research,
work in teams,
build functional prototypes for mobile devices, (Apple's iPad)
design and develop mobile interfaces,
latest development technologies, tools, frameworks and
programming, languages to create mobile apps,
production process of new mobile apps,
scripting, debugging, and programming for mobile development

Storyboard – Willis 2015



Storyboard – Drift 2015



Electronic Visualization Laboratory (EVL)

- 1969 Dan Sandin is invited to UIC's Art Dept. to bring computers to the art curriculum
- 1973 Tom DeFanti comes to UIC with the GRASS system, EVL begins as a short order media house for education and research



Electronic Visualization Laboratory (EVL)

40 years of Art/Science collaboration at UIC

Joint program: CS and Art & Design departments

First program in the US offering MFA that is a formal collaboration of art and computer science 1973-2014

Electronic Visualization Laboratory (EVL)

Advanced networking research

Distributed computing/visualization

Collaborative software

Advancement of tools and techniques for collaborative work over high-speed, experimental networks

Development of viable, scalable, deployable stereo displays

Development of VR hardware, software, tools and techniques

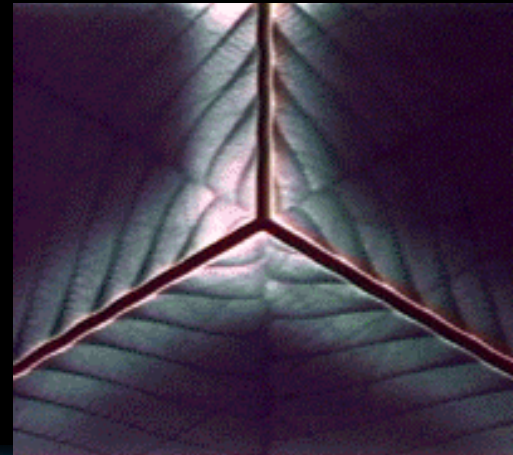
EVL – The Engine Becomes Clear

- Artists organize projects, help visualize data, create media
- Artists are supported and get the toys to do their own work: often inspired by science
- Scientists get to communicate effectively
- EVL makes them look good
- EVL delivers visualization technology and techniques to science

Electronic Visualization Laboratory (EVL)

mid-70s - the Electronic Visualization Events
a series of live performances in which images were computer generated and color processed in real time with musical accompaniment

EVL helped to produce the CG special effects for the first Star Wars film



CAVE® 1992



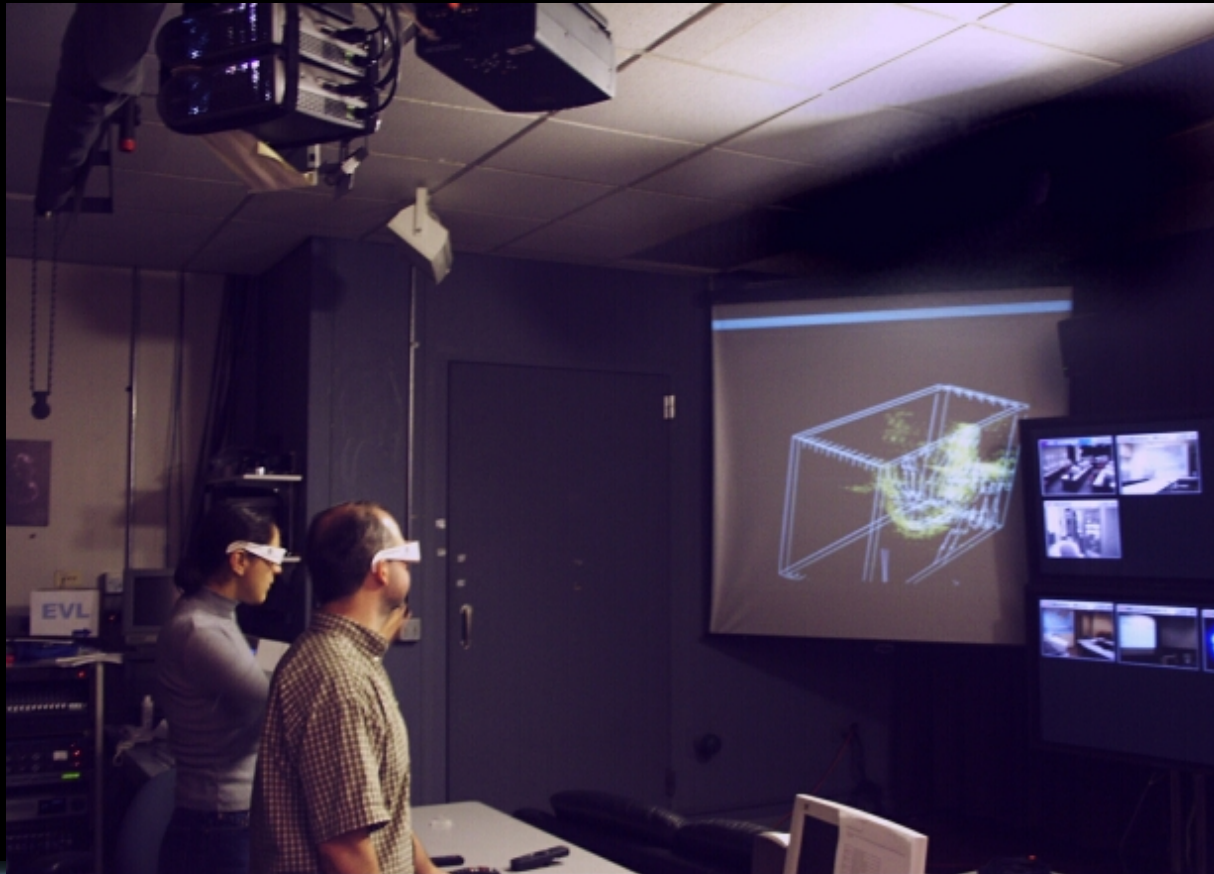
ImmersaDesk® 1995



Paris 1998



GeoWall -2000



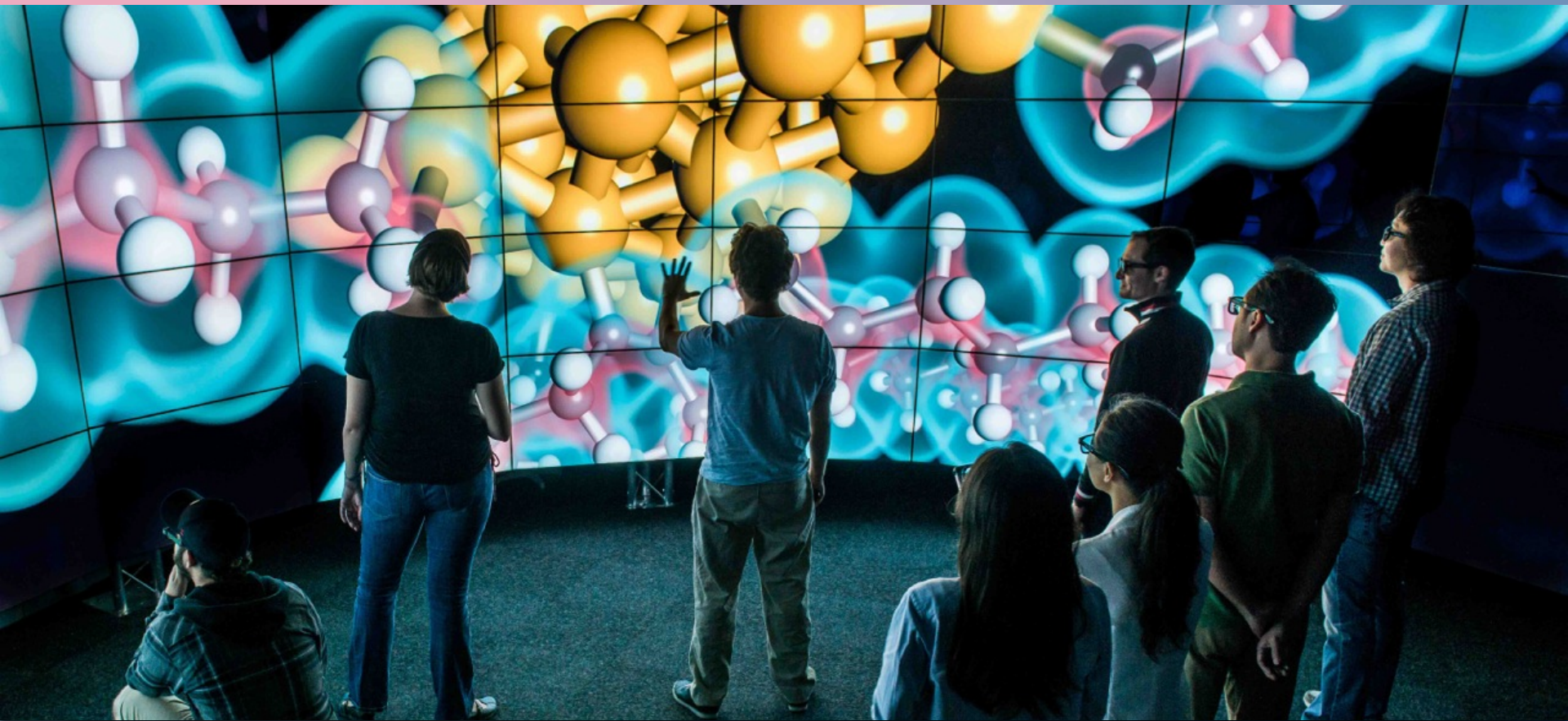
Varrier



CAVE2 -2012



Molecular Chemistry Dataset



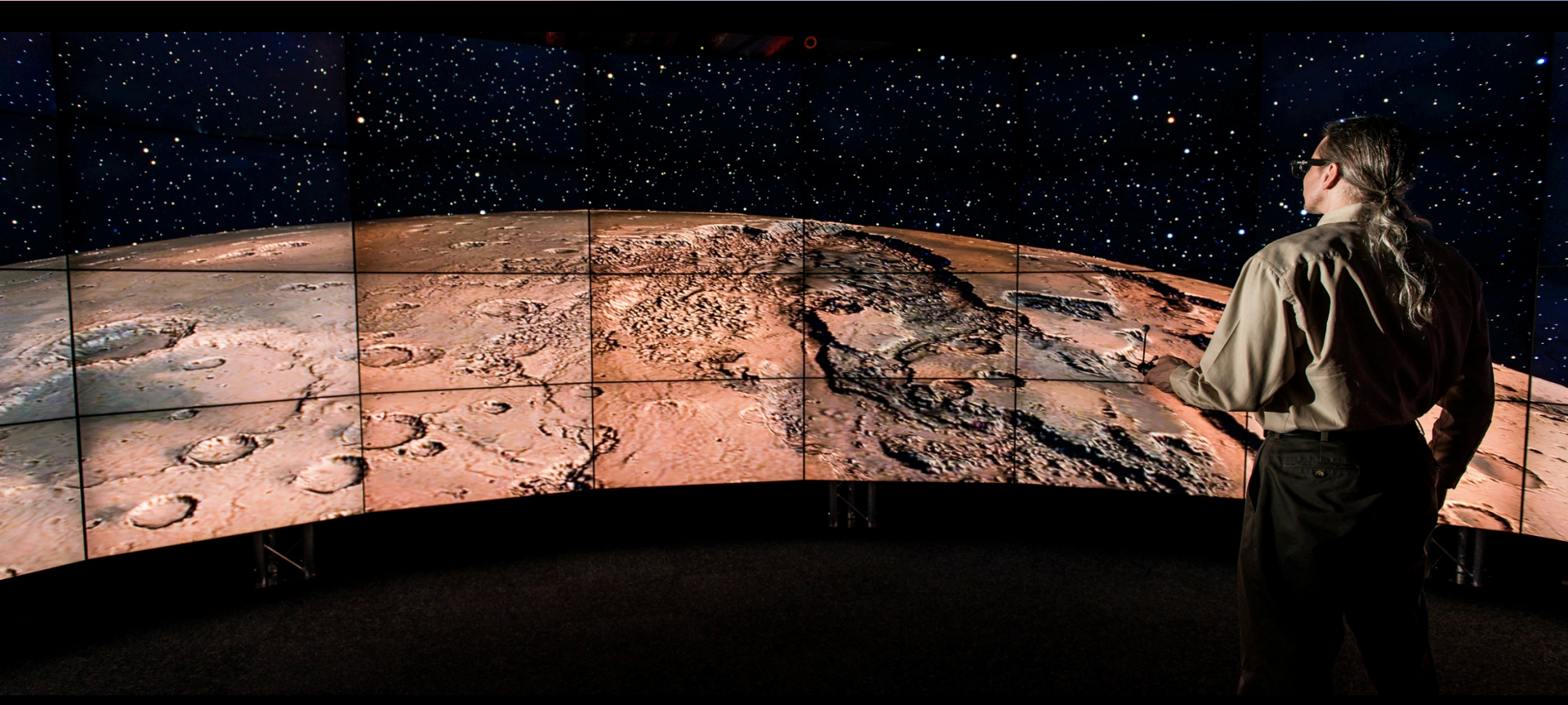
Particle Dreams in Spherical Harmonics



3D Brain MRI Data



Mars Surface



Fleet Commander - CyberCommons



Paint Program - CyberCommons



A Study of 4D Julia Sets

Iterations of $Z = Z^2 + K$ in the Quaternions

by Dan Sandin

NASA Visualization Explorer (NASAViz)



VISUALIZATION
EXPLORER



NASA Visualization Explorer (NASAViz)

- Free NASA iPad app
- Developed for the general public
- Releases 2 data-viz stories per week
- Scientific Storytelling effort from NASA/GSFC
- Covers all NASA science themes: Earth, Planets, Sun, Universe



NASA Visualization Explorer



A NEW DAWN



The Milky Way and Andromeda galaxies are destined to collide. See how it will all unfold.

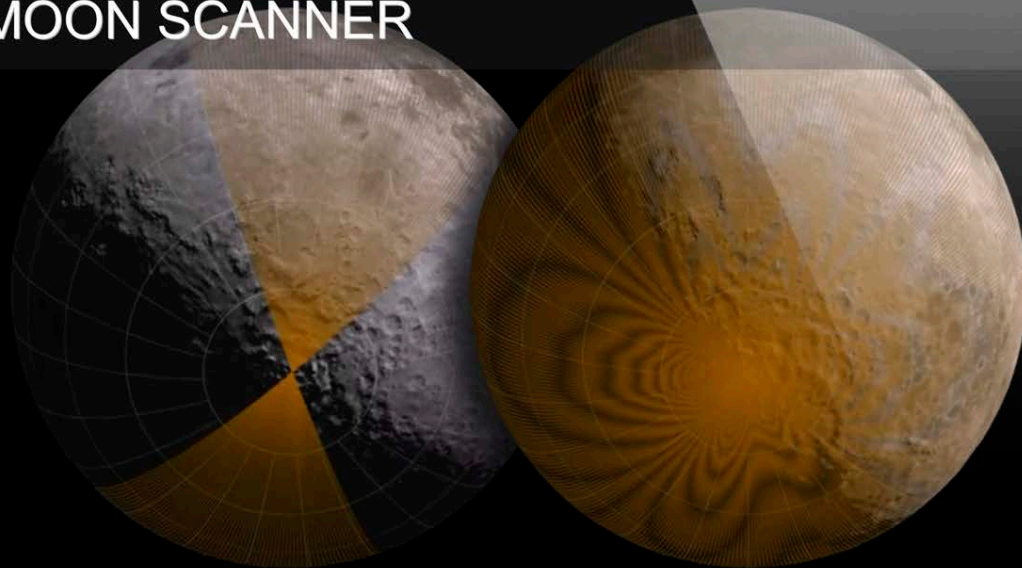




NASA Visualization Explorer



MOON SCANNER



See how NASA's robotic probe surveys the moon.





NASA Visualization Explorer



A NEW DAWN



◀ The Milky Way and Andromeda galaxies are destined to collide. See how it will all unfold. ▶





NASA Visualization Explorer



TRACKING A SUPERSTORM



◀ A NASA computer model simulates the astonishing track and forceful winds of Hurricane Sandy. ▶





NASA Visualization Explorer



PERPETUAL OCEAN



◀ Watch surface currents circulate in this high-resolution, 3D model of the Earth's oceans. ▶





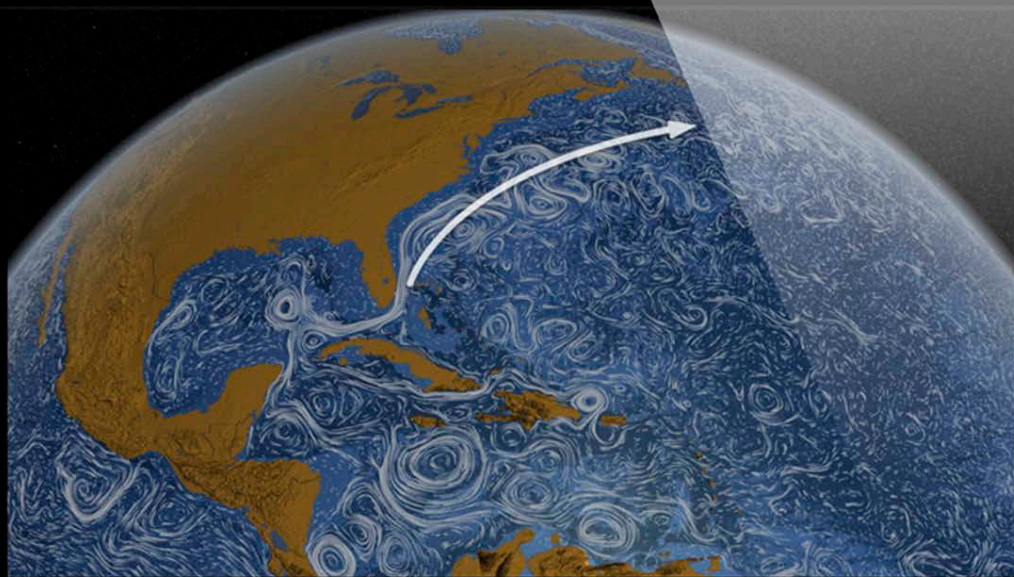
PERPETUAL OCEAN



◀ Watch surface currents circulate in this high-resolution, 3D model of the Earth's oceans. ▶

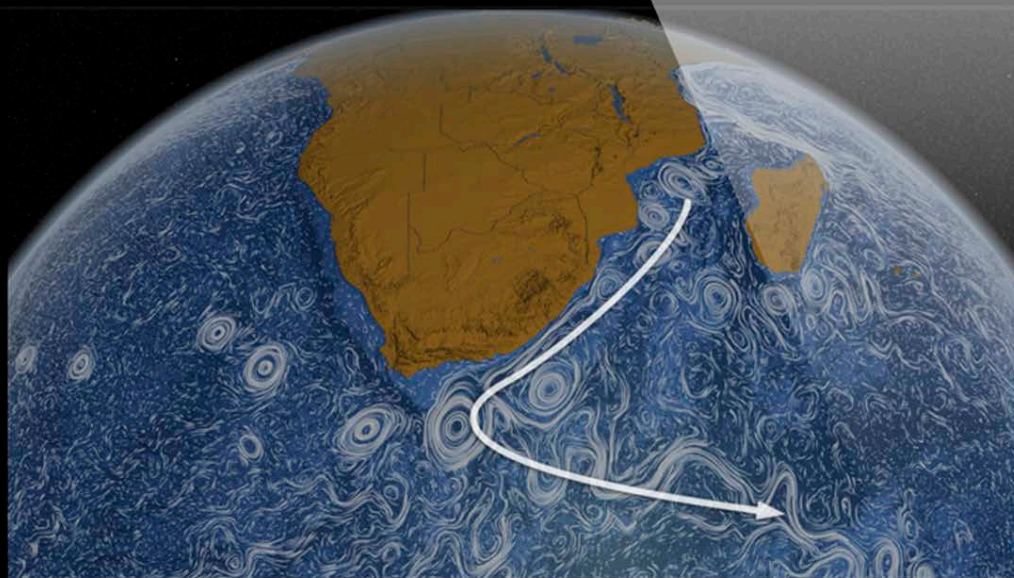
Driven by wind and other forces, currents on the ocean surface cover our planet. Some span hundreds to thousands of miles across vast ocean basins in well-defined flows. Others are confined to particular regions and form slow-moving, circular pools. Seen from space, the circulating waters offer a study in both chaos and order. The visualization below, based on ocean temperature, salinity, sea surface height and sea ice data collected during field observations and by NASA satellites between July 2005 and December 2007, highlights many of the world's most important ocean surface currents. Watch powerful, fast-moving currents like the Gulf Stream in the Atlantic Ocean and the Kuroshio in the Pacific





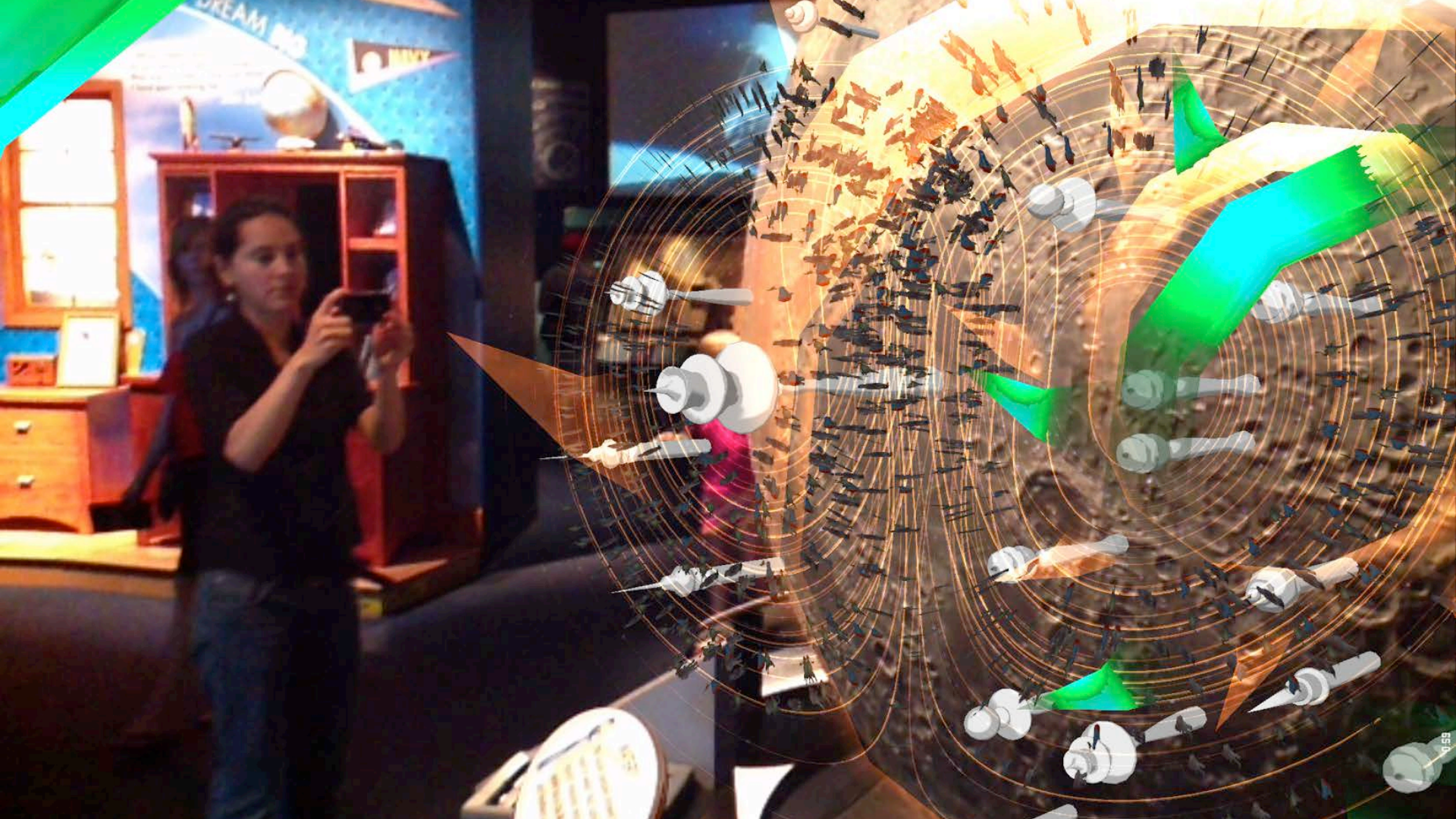
◀ The Gulf Stream carries warm water from the eastern coastline of the United States to regions of the North Atlantic Ocean. ▶





The Agulhas Current travels along the coastline of Mozambique and South Africa and then loops eastward.





DREAM BIG

NAVY