

How to design an effective poster



How to create an Effective Eye-Catching Poster



step 1: Text

- * Make sure you include just enough text to get your point across. Pay attention to the size and font. Check your spelling and grammar on your poster.
- * Know the audience of your poster. Make sure the vocabulary that you use fits the audience.
- * Get your message across! What is the point of your poster? Why should we look at it?

Step 2: Graphics

- * Graphics are one of the most important parts of your poster. Do not put them in a far corner of your poster if you want your audience to see them.
- * Process the graphics for your reader. What are these graphs, tables and pictures about? How do they fit in with the text?

Step 3: Color

- * Make effective use of color. Too much color will overuse your space.
- * However, color lets your audience focus on the important parts of your poster.
- * Highlight your graphs with color

Step 4: The Big Picture

- * Use your creativity.
- * Try to make your poster stand out from the rest.
- * All elements of your poster should be integrated together.
- * Finally, make sure your poster makes sense.



How to Create an Effective Eye-Catching Poster



- + Catches attention
- + I know in what order to read it

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- Not serious
- No pictures

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- * Finally, make sure your poster makes sense.



The website's homepage is an interactive gateway that allows for easy access to visualizations, presentations, information about the SCEC internships, links to the Earthquake Country Alliances, the ability to download SCEC-VDO for personal use, and more.



www.Drupal.org

Drupal is a free and open source content management system that allows an individual or an organization to easily publish, manage, and organize a wide variety of content on a website. Drupal has built-in functionality that combines with free add-on modules to enable features such as forums, picture, video galleries, and much more. Although programming skills are unnecessary for basic website installation and administration, knowledge of computer languages such as HTML helps in further development of the site. The USEIT Website Development Team utilized Drupal to manage content developed using SCEC-VDO.

Abstract

The Undergraduate Studies in Earthquake Information Technology (USEIT) program unites undergraduates to participate in a leading-edge internship that enables them to work in teams to tackle a scientific "Grand Challenge." The 2009 "Grand Challenge" appointed the task of delivering SCEC-VDO visualizations via a content management system. The Website Development Group utilized an open source content management system called Drupal to create a website that delivers USEIT created content over the internet.

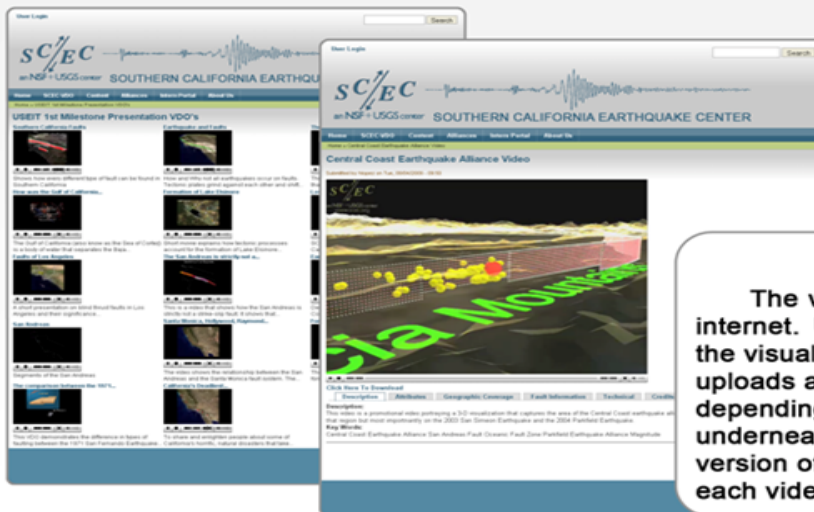
In order to accomplish the difficult task of building a user-friendly website, the team underwent a process of learning unfamiliar computer languages to manipulate Drupal's already robust set of features.

The goal was to make SCEC-VDO products more accessible to a broader audience. The website's main feature is the ability to stream visualizations online. The team also revolutionized the way metadata for visualizations is managed and displayed. After refining the metadata rubric, it became more precise and organized. Also, the website provides USEIT interns a portal for team members and directors to interact and enhances the ability to document the internship.

Ultimately, the website will serve as a window into the work of the USEIT internship program. This easily navigated website connects the interns to the public.



The Intern Portal is a hub that allows interns to interact and for the management of intern tasks and activities. It is only accessible to registered users and contains intern specific content.



The Drupal Group consists of Vanessa Rodriguez (left), Yongxin Fei (center), and John Montes De Oca (right).



Courtesy of Saul Garcia

SCEC-VDO

The website's main feature is the ability to stream videos over the internet. Users must enter metadata, or information and attributes about the visualization, when uploading a video to the site. After a user uploads a video, it is automatically sorted into an appropriate gallery, depending on the entered metadata. The metadata is then displayed underneath the video and can be easily navigated. The high resolution version of each video can be downloaded by clicking a link attached to each video for personal or educational use.

Poster Powered By USEIT 2009 Interns
Yongxin Fei¹ | John Montes De Oca² | Vanessa Rodriguez³

(1) University of California, Los Angeles - Los Angeles (2) University of Southern California - Los Angeles (3) Loyola Marymount University - Los Angeles



- May catch attention
- Large portion of text to read first
- Little pictures
- In what order should I read it?
- What to get from it?

Abstract

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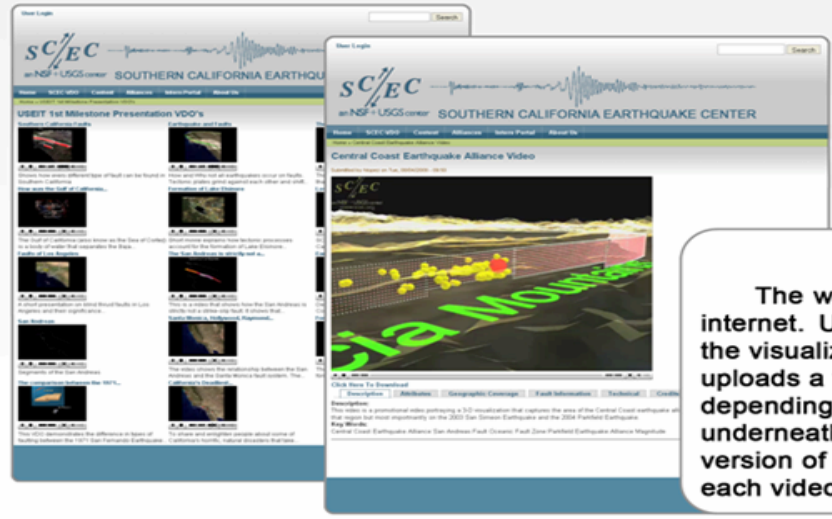
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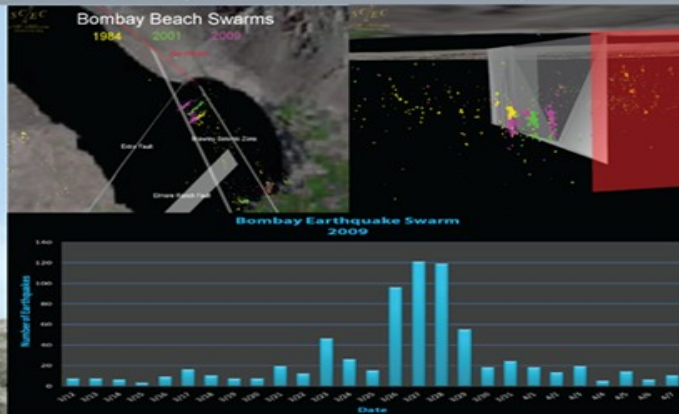
Magali Barba¹, Saul Garcia², Caroline Kim⁴, Hellen Lopez⁴, Brian Oliver³, Roque Quiroz², Ziran Zhang¹

(1) U.C. Berkeley, Berkeley, CA (2) East Los Angeles College, Los Angeles, CA (3) Cal Poly Pomona, Pomona, CA (4) Pasadena City College, Pasadena, CA

Abstract

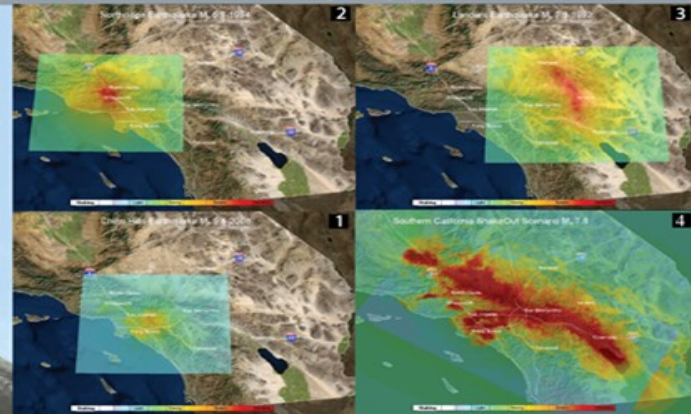
The Grand Challenge of the 2009 Undergraduate Studies in Earthquake Information Technology (USEIT) Program was to deliver Southern California Earthquake Center - Virtual Display of Objects (SCEC-VDO) images and animations of faults and earthquake sequences to SCEC, the Earthquake Country Alliance, and other virtual organizations via a content management system that captures the metadata and guides the user. For the production team, the primary focus was on the development and delivery of useable visualizations using SCEC-VDO as well as the creation of metadata associated with the visualizations. The production team was also tasked with helping to improve SCEC-VDO by identifying limitations and bugs within the software. During the research into the individual alliances within the Earthquake Country Alliance (ECA), the production team encountered several challenges. These challenges included the need for relocated earthquake catalogs, a visualization of the Cascadia Subduction Zone, a rubric for creating consistent SCEC-VDOs, a uniform format for gathering and submitting metadata, and several limitations within the software. One of the challenges was met by researching and locating better datasets. Once the datasets were obtained, the production team converted them into formats that were compatible with SCEC-VDO or they were sent to the development team for implementation into SCEC-VDO. The result was a new relocated earthquake catalog and a visualization of the Cascadia Subduction Zone. A rubric and metadata sheet was also created for current and future SCEC USEIT interns with the goal of creating both professional and consistently accurate movies. After overcoming these challenges, the production team was able to produce professional movies. Two movies were created for SCEC scientists, four movies for the alliances, and three movies for other virtual organizations.

Bombay Beach Swarm Sequence



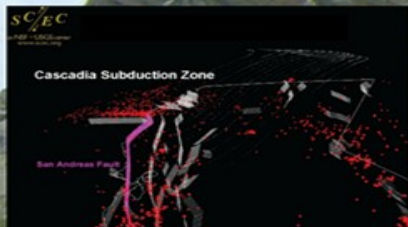
Topographic images and a 3D visualization of the Bombay Beach Swarms, which are earthquake swarms that occurred in 1984, 2001, and 2008. To display the Bombay Beach swarms, we used a 3D visualization of the Earthquake Country Alliance. The bottom image is a graph of the number of earthquakes per hour for the 2009 Bombay Beach Swarms.

Shake Map Application



Shake Map Application results for the 2009 Undergraduate Studies in Earthquake Information Technology (USEIT) Program. The maps show the predicted seismicity for the 2009 Undergraduate Studies in Earthquake Information Technology (USEIT) Program. The maps show the predicted seismicity for the 2009 Undergraduate Studies in Earthquake Information Technology (USEIT) Program.

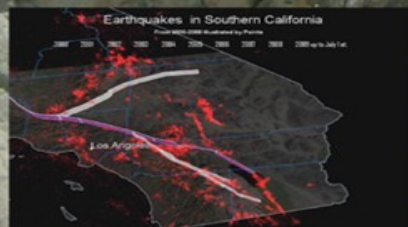
Earthquake Country Alliance



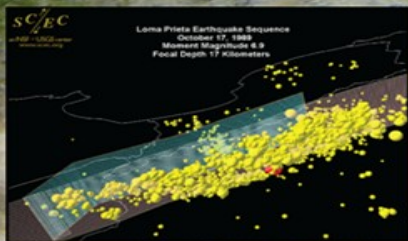
This movie, created for the Redwood Coast Tsunami Workgroup, describes historical earthquakes in Northern California. It concentrates on the Cascadia Subduction Zone in the northwest region of California, which may result in a tsunami.



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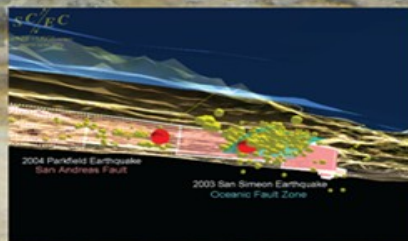
This movie displays major faults and seismic activity in Southern California for the Southern California Earthquake Alliance.



A Bay Area Alliance 3-D movie of the Loma Prieta Earthquake with the red sphere highlighting the hypocenter of the main shock and the yellow spheres highlighting the hypocenters of the aftershocks.

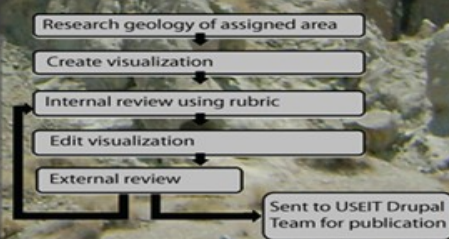
The Mission

The Southern California Earthquake Center (SCEC) in collaboration with the Earthquake Country Alliance (ECA) created earthquake visualizations that can be used to educate the public about earthquake hazards in California. The individual alliances are currently composed of four regions with their areas of outreach: The four members of the Earthquake Country Alliance are the Redwood Coast Tsunami Workgroup, the Bay Area Earthquake Alliance, the Central Coast Earthquake Alliance, and the Southern California Earthquake Alliance. The 2009 USEIT interns were assigned to research an alliance's region and hazards to create SCEC-VDO movies. The movies can then be used by the individual alliances to inform the general public of their specific hazards. In the future, the individual alliances can request specific visualizations created by SCEC interns for their particular region.



The Central Coast Earthquake Alliance region was affected by two major and recent earthquakes: the 2003 San Simeon Earthquake and the 2004 Parkfield Earthquake. The above movie shows these two earthquake sequences and the faults they took place on, both occurring relatively close to each other.

Methods



SCEC-VDO Project-based Learning Rubric

Target Score is 3 or better

Score Level	Content	Consistency	Organization	Presentation
4	<ul style="list-style-type: none"> Is well thought out and supports the solution to the challenge or question Has clear goal that is related to the topic Is accurate All faults are displayed Earthquake spheres are displayed at correct location and depth 	<ul style="list-style-type: none"> Same font, size, and color Begins and ends in the same reference frame Remains in 1024x768 Uses color to highlight specific information No redundant information 	<ul style="list-style-type: none"> Information is clearly focused in an organized and thoughtful manner Information is constructed in a logical pattern to support the solution 	<ul style="list-style-type: none"> Multimedia is used to clarify and illustrate the main points Format enhances the content Presentation captures audience attention Presentation is organized and well laid out
3	<ul style="list-style-type: none"> Is well thought out and supports the solution to the challenge or question Has clear goal that is related to the topic Is accurate Some secondary faults are not displayed Earthquake spheres are displayed at wrong location and depth 	<ul style="list-style-type: none"> Use of same font, but different size and color Ends in different reference frame than beginning Doesn't render in 1024x768 Uses color to highlight specific information No redundant information 	<ul style="list-style-type: none"> Information supports the solution to the challenge or question Information is constructed in a logical pattern to support the solution 	<ul style="list-style-type: none"> Multimedia is used to illustrate the main points Format is appropriate for the content Presentation captures audience attention Presentation is well organized
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Production Team



Brian Oliver, Saul Garcia, Ziran Zhang, Roque Quiroz, Hellen Lopez, Magali Barba, Caroline Kim

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Abstract

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- + attractive design
- + I know how to read it
- + good visual support

- Large chunk of text at the beginning

Bombay Beach Swarm Sequence

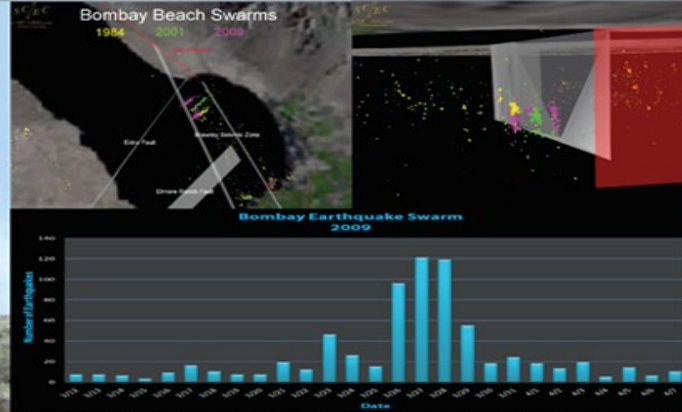


Figure 1. Bombay Beach Swarms. The top image shows the earthquake swarms that occurred in 1994, 2001, and 2008. The bottom image is a graph of the number of earthquakes versus depth for the 2009 Bombay Beach Swarms.

Shake Map Application

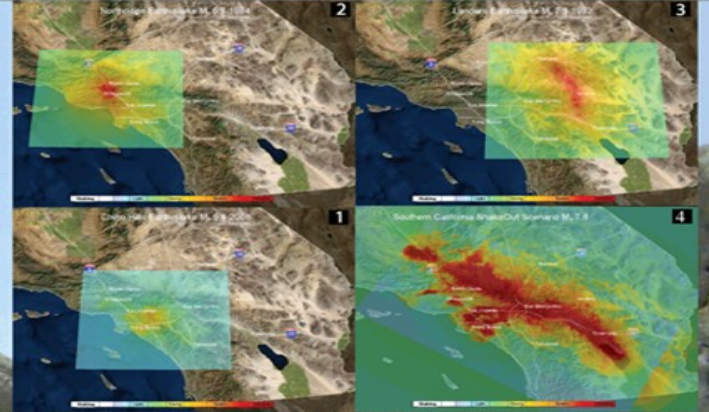
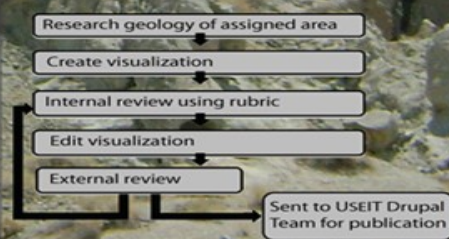


Figure 2. Shake Map Application. The top row shows the Shake Map Application results for the 1994 Northridge Earthquake and the 2001 Mw 7.8 earthquake. The bottom row shows the Shake Map Application results for the 2009 Bombay Beach Swarms.

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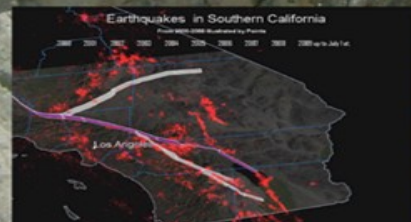
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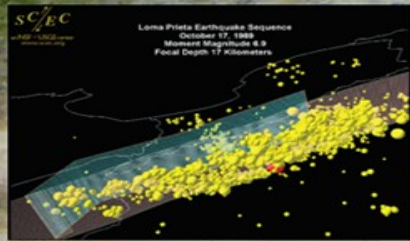
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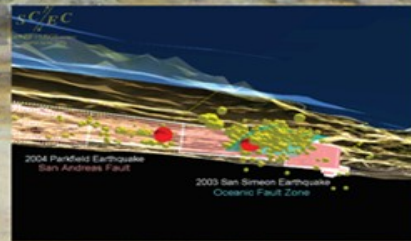
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The Mission

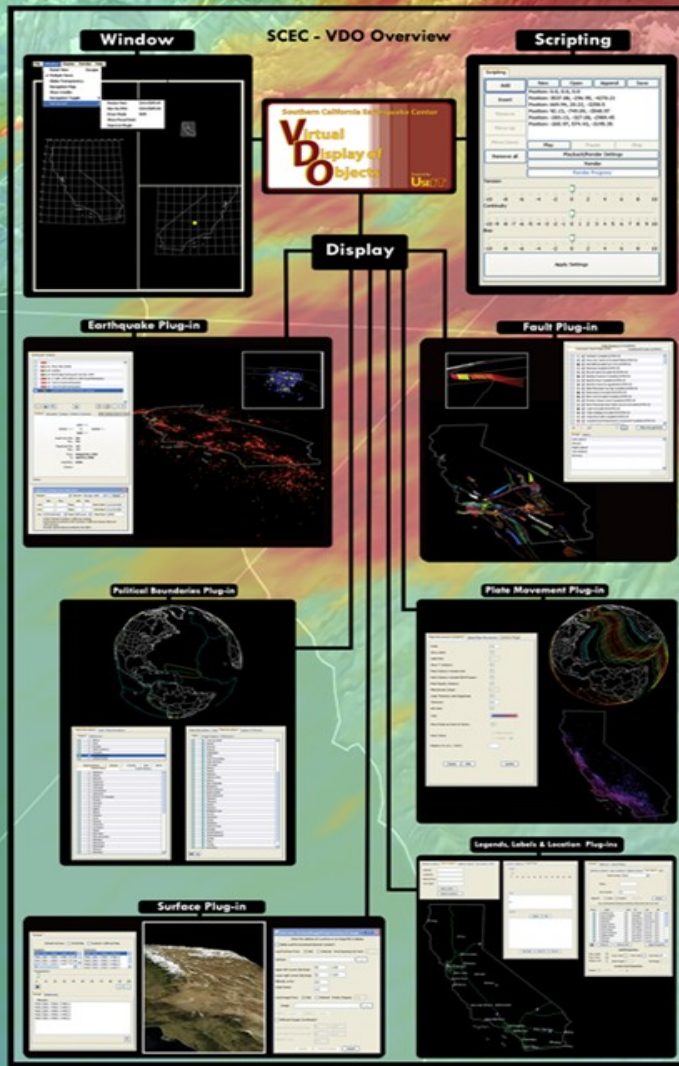
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Jason Armstrong¹, Elena Boyd², Jordan Brown³, Alec Patino³, Kaitlin Welch⁴

(1) Arizona State University, Tempe, AZ (2) University of Texas, Austin, TX (3) University of Southern California, Los Angeles, CA (4) University of Cincinnati, Cincinnati, OH



SCEC-VDO Overview

SCEC-VDO offers many features that allow users to display earthquake information and technology in 3D. Because SCEC-VDO uses focal point navigation and multiple perspectives, users can move around the globe easily. Along with its surface imagery and topographic mapping, SCEC-VDO also has the capability to display fault systems and earthquakes under the surface. This developing software has the ability to display political boundaries, plate outlines, and locations. To accredit SCEC-VDO as an educational tool, Scripting, a movie-making plug-in, is the most important to UsIt Interns. By combining many of the display plug-ins, students can produce movies that deliver earth science information most effectively.

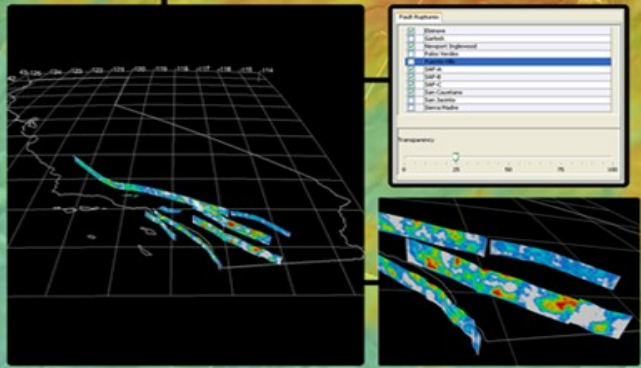
ABSTRACT

The Southern California Earthquake Center's Virtual Display of Objects (SCEC-VDO) is an object-oriented, open-source, internet-enabled software package showing interactive 3D displays of diverse data. Developed by SCEC Undergraduate Studies in Earthquake Information Technology (UsEIT) interns in 2002, SCEC-VDO continues to be improved each summer. It is currently being used by a growing number of SCEC scientists and in a multi-media curriculum at USC.

The Software development team of UsEIT focused on the implementation of new tools into SCEC-VDO to create visualizations that will be targeted to a general audience in accordance with the Great California ShakeOut. One feature created was the Shake Map representation on the 2D surface of the earth, allowing users to see shake maps of earthquakes within the 3D world. To show population density in relation to fault systems and earthquakes a feature was created using Census Tract data. To give the public a point contact for their region, the Earthquake Country Alliance Regional Areas feature was added. A new 3D slip rate model feature was created to display fault ruptures underneath the earth's surface. The Cascadia Subduction zone was modeled in 3D to show the threat it poses to residents in the northwest United States.

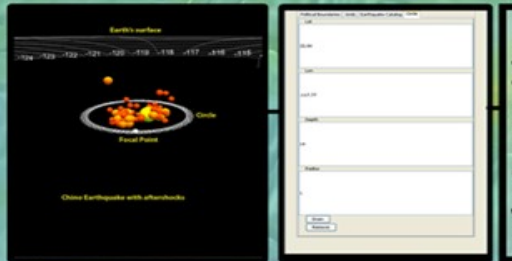
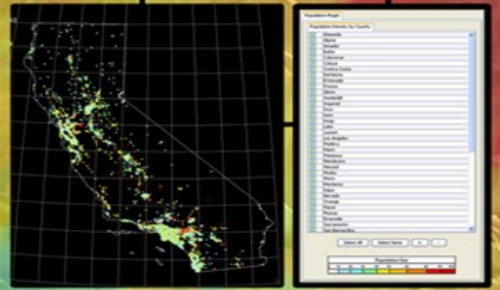
Fault Ruptures

This plug-in displays eleven of California's largest faults and the associated slip that would occur along them if a high magnitude earthquake were to happen. The data comes from SCEC's CyberShake project, a comprehensive catalog of simulated earthquakes. The capability to add any CyberShake simulation to this tool makes it an extremely useful resource for viewing these ruptures in a 3D environment.



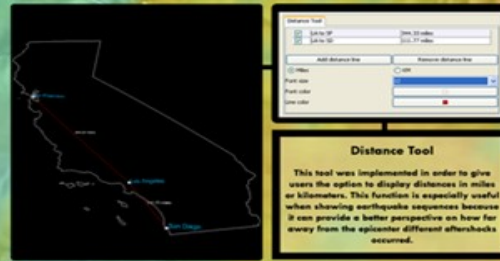
Population Density Plug-in

This feature displays the population density for a selected county by plotting a colored point at each census tract. A census tract is a region defined for taking a census. Depending on the population size, the plotted points are given different colors. Census tract boundary lines can also be displayed for a more accurate representation. Population density allows users to see where the highest threat is in relation to fault systems and earthquakes.



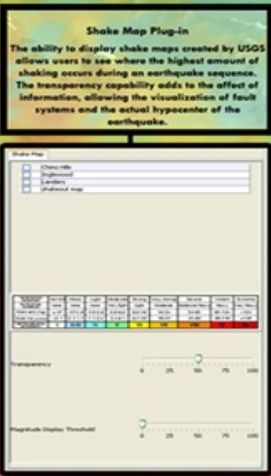
Circle Plug-in

The circle plug-in is designed to simulate undistorted camera motion within SCEC-VDO. The undistorted motion causes a disorienting series of unbalanced motion when rotating the camera about a fixed point. The circle plug-in alleviates most of this motion by allowing the production team to accurately locate their focal point about a circle around the desired object. The circle allows the accurate plotting of focal points in three dimensions, both parallel to the surface plane and to the depth of the object.



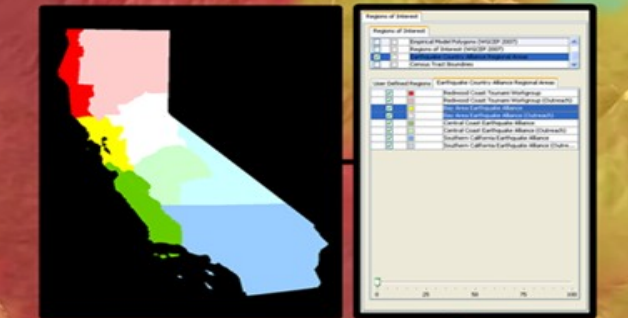
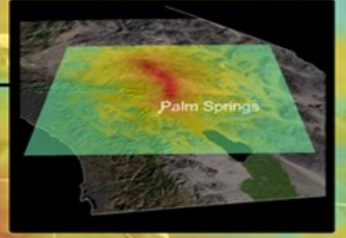
Distance Tool

This tool was implemented in order to give users the option to display distances in miles or kilometers. This function is especially useful when showing earthquake sequences because it can provide a better perspective on how far away from the epicenter different aftershocks occurred.



Shake Map Plug-in

The ability to display shake maps created by USGS allows users to see where the highest amount of shaking occurs during an earthquake sequence. The transparency capability adds to the affect of information, allowing the visualization of fault systems and the actual hypocenter of the earthquake.



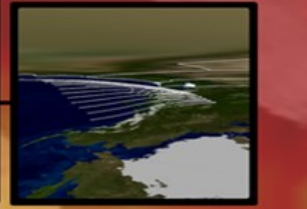
Alliance Boundary Plug-in

This plug-in allows users to select and highlight the different alliances within the Earthquake County Alliance. Each boundary is assigned a specific color and can be displayed as an outline of counties or a filled-in polygon. These boundaries are used to show the general public which alliance they are located in and who to contact for information related to earthquakes and the ShakeOut Scenario.



Cascadia Subduction Zone

To show Northern Californians their greatest threat when dealing with the Great California ShakeOut, the Cascadia Subduction Zone needed to be displayed in 3D. The potential for a 9.0+ earthquake with a resulting tsunami is the scenario for that part of California.



Window

SCEC - VDO Overview

Scripting

Display

Earthquake Plug-in

Fault Plug-in

Political Boundaries Plug-in

Surface Plug-in

Legend, Labels & Location Plug-in

catches attention
 it's pleasant to
 smile & print
 How to read it?

ABSTRACT

The Southern California Earthquake Center's Virtual Display of Objects (SCEC-VDO) is an object-oriented, open-source, internet-enabled software package showing interactive 3D displays of diverse data. Developed by SCEC Undergraduate Studies in Earthquake Information Technology (UseIT) interns in 2002, SCEC-VDO continues to be improved each summer. It is currently being used by a growing number of SCEC scientists and in a multi-media curriculum at USC.

The Software development team of UseIT focused on the implementation of new tools into SCEC-VDO to create visualizations that will be targeted to a general audience in accordance with the Great California ShakeOut. One feature created was the Shake Map representation on the 2D surface of the earth, allowing users to see shake maps of earthquakes within the 3D world. To show population density in relation to fault systems and earthquakes a feature was created using Census Tract data. To give the public a point contact for their region, the Earthquake Country Alliance Regional Areas feature was added. A new 3D slip rate model feature was created to display fault ruptures underneath the earth's surface. The Cascadia Subduction zone was modeled in 3D to show the threat it poses to residents in the northwest United States.

Fault Ruptures

This plug-in displays eleven of California's largest faults and the associated slip that would occur along them if a high magnitude earthquake were to happen. The data comes from SCEC's CyberShake project, a comprehensive catalog of simulated earthquakes. The capability to add any CyberShake simulation to this tool makes it an extremely useful resource for viewing these ruptures in a 3D environment.

Population Density Plug-in

This feature displays the population density for a selected county by plotting a colored point at each census tract. A census tract is a region defined for taking a census. Depending on the population size, the plotted points are given different colors. Census tract boundary lines can also be displayed for a more accurate representation. Population density allows users to see where the highest threat is in relation to fault systems and earthquakes.

Shake Map Plug-in

The ability to display shake maps created by USGS allows users to see where the highest amount of shaking occurs during an earthquake sequence. The transparency capability adds to the affect of information, allowing the visualization of fault systems and the actual hypocenter of the earthquakes.

Earthquake Plug-in

Legend, Labels & Location Plug-in

Earth's Surface

Circle Plug-in

The circle plug-in is designed to eliminate undesired camera motion within SCEC-VDO. The undesired motion causes a disorienting series of unbalanced motions when rotating the camera about a fixed point. The circle plug-in eliminates most of this motion by allowing the production team to accurately locate their focal point about a circle around the desired object. The circle allows the accurate plotting of focal points in three dimensions, both parallel to the surface plane and to the depth of the object.

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SCEC-VDO Overview

SCEC-VDO offers many features that allow users to display earthquake information and technology in 3D. Because SCEC-VDO uses focal point navigation and multiple perspectives, users can move around the globe easily. Along with its surface imagery and topographic mapping, SCEC-VDO also has the capability to display fault systems and earthquakes under the surface. This developing software has the ability to display political boundaries, plate outlines, and locations. To accredit SCEC-VDO as an educational tool, Scripting, a movie-making plug-in, is the most important to UseIT interns. By combining many of the display plug-ins, students can produce movies that deliver earth science information most effectively.



A Novel Approach to Campus Health and Wellness: The UCLA Healthy Campus Initiative



¹ Department of Environmental Health Sciences,
University of California, Los Angeles Fielding School of Public Health

Tyler D. Watson, MPH¹ and Ryan Babadi, MPH²

² Department of Environmental and Occupational Health Sciences,
University of Washington School of Public Health

Live Well is a campus-wide wellness movement with the goal of making UCLA the healthiest university campus in America.

<http://healthy.ucla.edu/>

CAMPUS POPULATION

Live Well includes the entire campus community:

- ~4,000 faculty
- ~26,000 staff
- ~42,000 students
- ~200 buildings = 17 million ft² built space
- 419 acres (0.66mi²); smallest UC campus

CORE VALUES

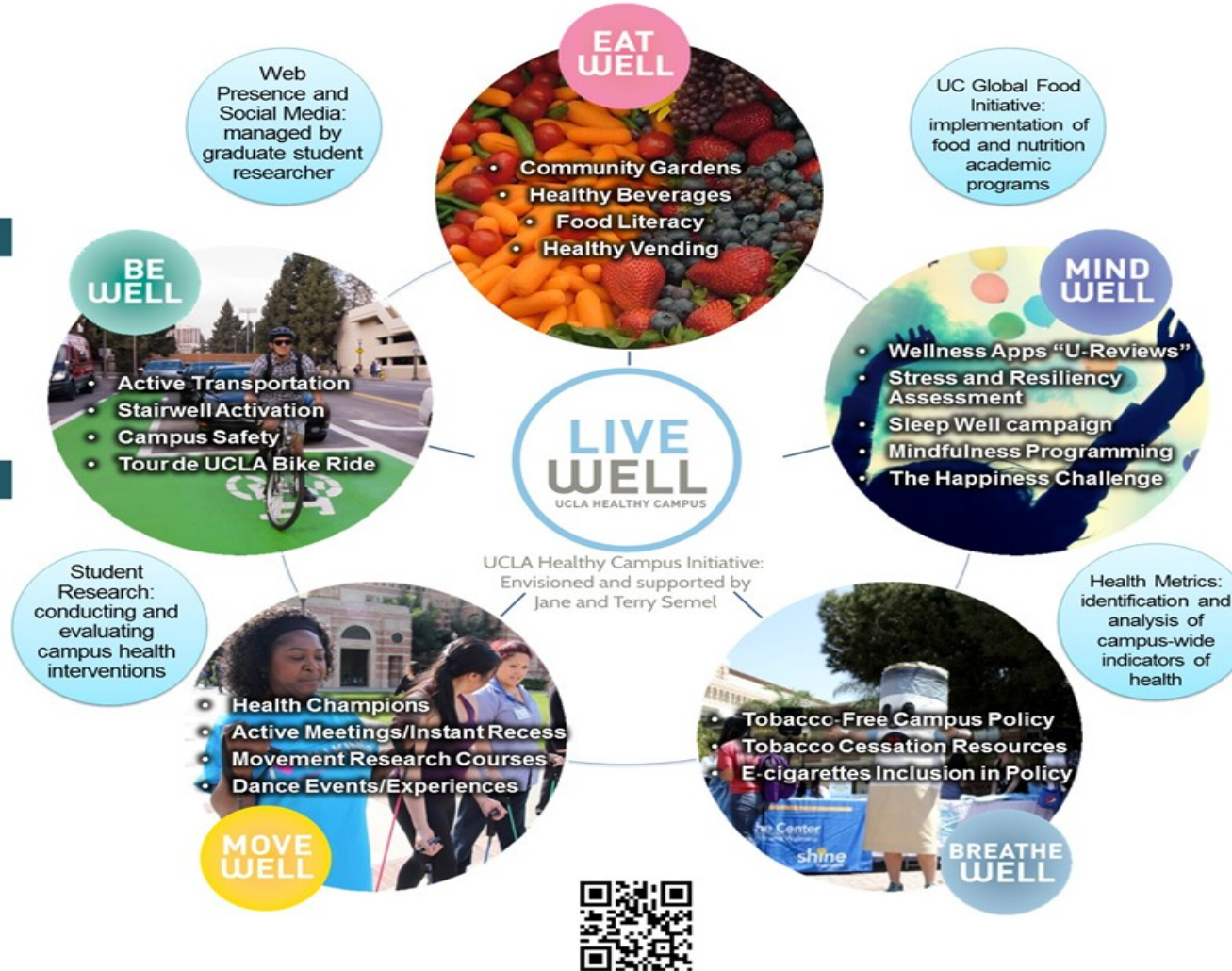
A "healthy campus" is a place that:

1. Fosters high-level wellness
2. Encourages personal responsibility
3. Respects diversity
4. Strives to reduce inequalities in health
5. Is integrative

PROCESS

- Support and integrate existing health-related groups, programs, and activities
- Use best practices to coordinate new approaches and programs
- Map campus assets and learn from different stakeholders
- Organize community collaborations and facilitate bottom-up approaches
- Host monthly steering committee meetings and area-specific working groups
- Fund and facilitate student projects related to Live Well goals and values
- Develop metrics to measure health and wellness changes
- Maintain a website and other campus communications for resources and events

STRUCTURE



CHALLENGES AND SUCCESSES

Challenges:

- Cross-campus coordination of large groups
- Branding and recognition
- Student turnover and leadership transition
- Large and diverse campus population
- Wide range of health disparities

Successes:

- Bringing together diverse health groups
- Practical, action-based projects
- New data collection and publications
- Impact beyond the UCLA campus
- UC President Napolitano recommendation for a Live Well model at all UC campuses

KEYS TO SUCCESS

- Organizational integration
- Administration buy-in
- Interdisciplinary leadership
- Including non-traditional stakeholders
- Targeted and adaptable use of resources
- Combination of research and practice
- Collaboration between pods
- Graduate student researcher input
- FUN!

ACKNOWLEDGEMENTS

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• + catches attention

• + easy to follow

• + good visuals and layout

• + QR code and link

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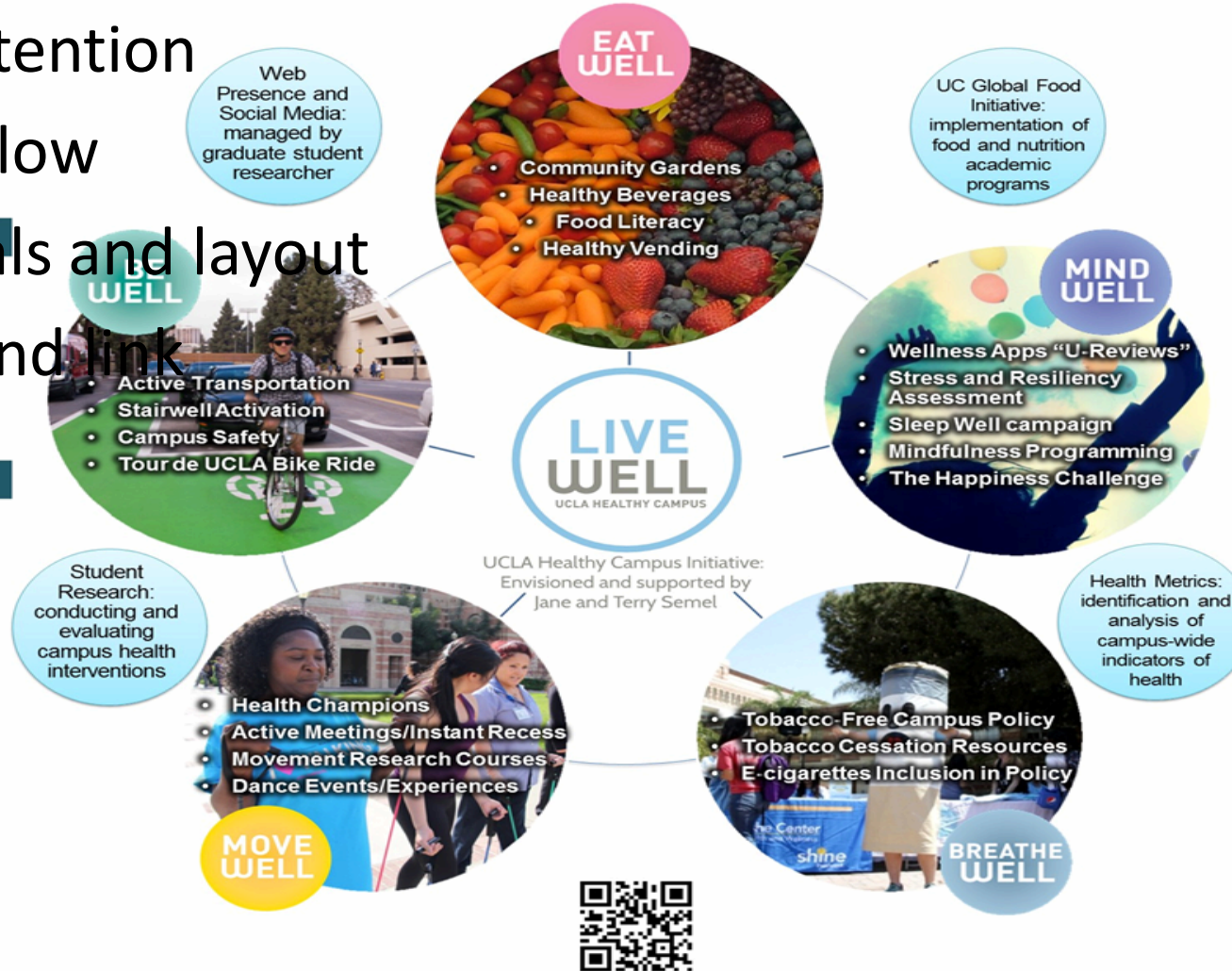
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