NEWS RELEASE

New Exhibition of NAE Member's Treemap Art at the Keck Center

WASHINGTON – Cultural Programs of the National Academy of Sciences announces "Every AlgoRiThm has ART in it: Treemap Art Project," a new exhibition featuring 12 works by National Academy of Engineering member and University of Maryland professor Ben Shneiderman. The exhibition opens Oct. 16, 2014, and will remain on view through April 15, 2015, at the Keck Center, 500 Fifth St., N.W., in Washington, D.C.

Ben Shneiderman, a renowned data visualization expert, pioneered the treemap technique in the early 1990s. Treemaps are used to organize and visualize hierarchical (tree-structured) data as a set of nested rectangles. In this exhibition, he has stripped the text from his treemaps, allowing viewers to consider their aesthetic properties. The featured treemaps are based on data from a range of topics including global population, popular music, carbon emissions, economic growth, popular TED talks, airport activity, and basketball data.

Shneiderman writes, "Although I conceived treemaps for purely functional purposes (understanding the allocation of space on a hard drive), I was always aware that there were aesthetic choices in making appealing treemaps, such as design, color, aspect ratio, and the prominence of borders for each region, each hierarchy level, and the surrounding box. In addition, certain treemaps are inherently interesting because of the data displayed or patterns revealed." Shneiderman's artistic influences include the Op art (optical art) movement of the 1960s, as well as the work of Piet Mondrian, Josef Albers, Mark Rothko, Paul Klee, Kenneth Noland, Barnett Newman, and Hans Hofmann.

"Every AlgoRiThm has ART in it" is viewable by appointment only. Email Alana Quinn at aquinn@nas.edu to make an appointment. A photo ID is required for admittance. Download a PDF of the exhibition catalogue with essays by Ben Shneiderman, Manuel Lima, and JD Talasek. A hard copy is available upon request.

Related Event: Attend a D.C. Art Science Evening Rendezvous exploring technology and creativity on Oct. 16 from 6 p.m. to 8 p.m. (doors open at 5:30 p.m.) at the Keck Center, 500 Fifth St., N.W. The program features presentations by Shneiderman, as well as Manuel Lima, designer, author, researcher, and lecturer, New York City; Jon Froehlich, assistant professor, department of computer science and affiliate assistant professor, College of Information Studies, University of Maryland, College Park; and Jonah Brucker-Cohen, assistant professor of digital media and networked culture, Lehman College, City University of New York. Shneiderman will lead gallery tours before and after the DASER, at 5:30 p.m. and 8:15 p.m. Registration and a photo ID are required.

The **Cultural Programs of the National Academy of Sciences** sponsors exhibitions, concerts, and other events that explore relationships among the arts and sciences. For more information, call 202-334-2436 or visit www.cpnas.org. The National Academy of Sciences is a private, nonprofit institution that recognizes achievement in science by election to membership, and -- with the National Academy of Engineering, Institute of Medicine, and National Research Council -- provides science, technology, and health policy advice to the federal government and other organizations.

Images from the exhibition:
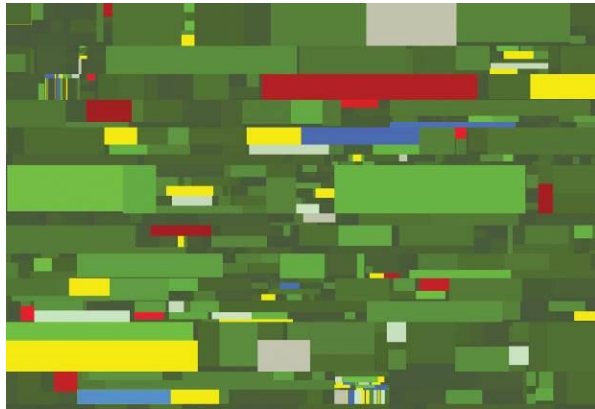
Frequent Flyers This dataset was collected from openflights.org. The boxes represent the ratio of international to domestic flights for individual airports. Larger sizes indicate more international flights while the colors represent the total number of routes served by an airport.
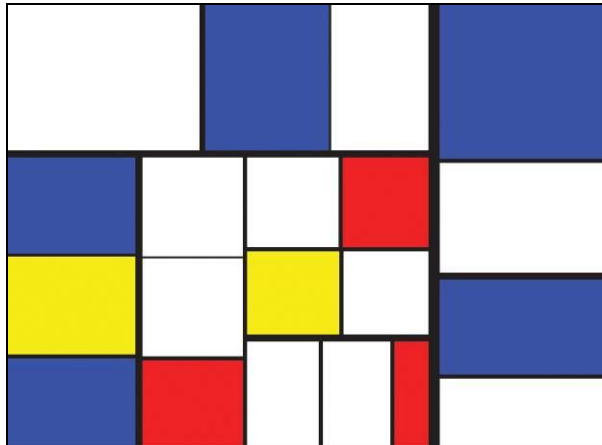
The Singing Mondrian This dataset contains musician data from Last.fm radio. On their 10th anniversary, Last.fm published a list of top 100 musicians based on their popularity as per user data. This visualization takes the top 20 musicians from that list and visualizes the number of unique listeners for each one. Each square or rectangle represents a musician and its size relates to the number of times their tracks were played while the color represents the genre of the artist.

Urban Blues This dataset was collected from the World Bank's website. It contains urban population count and annual urban population growth for all countries in 2010. The visualization includes countries with an urban population of 20 million people or more. Rectangle sizes represent urban population count for an individual country. Countries with negative urban population growth are colored pink—Ukraine is the only country fitting this criteria. Other countries are colored black or blue where black represents zero urban population growth and blue represents a positive urban population growth.

For print-quality images and an exhibition catalogue,
contact Alana Quinn, 202-334-2415, aquinn@nas.edu
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