ERIC RODENBECK, 38

The founder and creative director of Stamen Design in San Francisco, Rodenbeck has carved out a niche as a multidisciplinary designer with a serious technological bent. Recent projects range from a dynamic hurricane-tracking map for msnbc.com to a series of live interactive maps visualizing activity on the Web site digg.com. Much of his and his studio’s emphasis is on creating interactive environments where users can explore data and discover patterns themselves.

ArtScope, San Francisco Museum of Modern Art

The museum asked Stamen Design to create a “map” for wandering online among thirty-six hundred works from its permanent collection. Stamen produced this giant, interactive matrix—or canvas, or “slippery map.” “We had a long back-and-forth about what we were going to name the thing,” says Chad Covert of SFMOMA. “Is it a browser? Is it a map? An online gallery? The fact that we had a difficult time coming to a consensus is probably the best indication that we’ve gotten our heads on something new and interesting.” As a user moves the cursor over a piece, it enlarges and information about it appears on a side panel. You can find it at sfmoma.org/artscope.
CARLO RATTI, 37

An architect and civil engineer who practices in Turin, Italy, Ratti studies technology's effect on how people interact with their cities. Or, in his own words, "How to marry concrete and silicon." In 2003, he established the SENSEable City Laboratory at MIT, where he is an associate professor of the practice of urban technologies. His lab's current work includes a New York City trash-tracking project in which trash will be digitally tagged with "smart dust" and tracked to its final destination, revealing inefficiencies in the waste-disposal system.

Real-Time Rome

Ratti overlaid live, aggregate data from existing mobile-phone and transportation networks during the course of two days onto a basic map of Rome. The result: a picture of the city as an evolving organism.

Opposite page, top: Rome on July 9 and 10, 2006, during and after the World Cup final match that was played in Germany. From left to right: afternoon, evening, midnight. Above: The following evening, when the victors returned and Romans celebrated.

Text messages were sent, taxis congregated.

TONY JEBARA, 34

A graduate of the Media Lab at MIT, Jebara combines computer science, statistics, and graphic design to create new ways for humans and computers to interact. He is now the director of Columbia University's Machine Learning Lab, which explores how to take massive amounts of existing GPS data and reduce it to more user-friendly forms. Jebara is also the chief scientist at the technology company Sense Networks, which has developed a proprietary analytics engine called Macrosense that collects huge streams of location data in real time for its consumer application, Citysense.

Citysense

A free mobile-phone application, Citysense locates people with similar interests in the same locale. By collecting various sources of GPS data, Citysense produces a visual description of the flow of people around a city. It is available for BlackBerry users in San Francisco and will be rolled out in New York and Chicago in 2009. An iPhone version is expected in December. Citysense 2.0, out next year, will be able to build a model of a user's interests and where he or she spends time, and then "sense" where others with similar interests are at any moment. It will also place the user into a color-coded tribe, e.g., bankers are green, metalheads are red. You look at your phone and see a concentration-density map of where they're congregating.