

## PAUL J. MORIN



**P**AUL J. MORIN, director of the Polar Geospatial Center at the University of Minnesota is a digital cartography and 3-D visualization expert whose work is emblematic of the spirit of innovation, creativity, and entrepreneurship that accords with the aims of undergraduate education at Colorado College. Morin has revolutionized the mapping of Earth's polar regions by acquiring and processing high-resolution satellite imagery that provides a crucial geospatial resource for scientific research and monitoring of the Arctic and Antarctic. Since 2008, Morin has sponsored and worked closely with eight Colorado College interns whose summer work aided in this effort. For CC undergraduates, the access to costly, high resolution imagery of Antarctica and training in specialized computation and analysis methods allowed them to undertake original investigations of remote regions of Antarctica that are

inaccessible by any other means. The students presented their results at national and international conferences during the past few years. These CC alumni now employ the advanced geospatial skills they acquired through work with Morin to their academic and professional endeavors.

Morin is proficient in digital cartography and 3-D visualization and his work has contributed to educational programs in universities, science museums, and undergraduate textbooks. He specializes in rendering of Earth datasets, such as 3-D convection of Earth's interior, which are perceived by most as being too complex for non-specialists to understand. He served as the visualization expert for the National Center for Earth-surface Dynamics, the University of Minnesota Department of Geology and Geophysics, and the Minnesota Science Museum. His visualizations have been published in *Wired*, *National Geographic*, and *Nature*. In his current role as director of the Polar Geospatial Center, Morin manages sub-meter optical satellite imagery covering both of Earth's poles for the National Science Foundation and NASA, producing foundational geospatial products such as seamless imagery mosaics, high-resolution digital elevation models, and geologic maps. In support of this effort, he wrote proposals and obtained federal grants totaling \$15 million during the past 10 years. The National Academy of Sciences appointed Morin to serve as the U.S. representative to the Standing Committee on Antarctic Geographic Information under the Scientific Committee for Antarctic Research. Individual recognition for Morin came from the National Association of Geology Teachers, which selected him as an NAGT Distinguished Speaker in 2006-07.