

complicated problems in science and engineering is now a major instrument for design and development in many fields. In movies and television, advertising and rock videos, publishing and, yes, term papers, computer graphics are gaining ground.

Doctors use graphics to trace the effect of a drug on the body, publishers use them to lay out newspapers and industrial designers use them to create everything from sports cars to candy wrappers. For would-be artists and animators, it adds up to a challenging course of study and an intriguing career. Says New York illustrator Barbara Nessim, who added a computer to her repertoire in 1982: "Artists will still use paintbrushes, but the addition of a computer makes it possible to exercise many design options in much less time."

The boom came about when technological advances made computer imagery more accessible and affordable. Until recently, only costly mainframe computers were capable of generating sophisticated graphics. In the last three years, however, "supermemory chips" have made it possible for even personal computers to produce artwork. Now there's also a widening range of application software that is increasingly "user friendly" (read: idiot-proof). For anywhere from \$90 (for the Deluxe Paint program that runs on an Amiga) to \$800 (for a full-featured graphics program designed for the IBM PC), users can put together charts, graphs and free-form drawings. In the more sophisticated range, top-of-the-line computer-graphics systems that used to cost more than \$100,000 have dropped as low as \$10,000.

Artistic application: Many schools have been quick to take advantage of the improved technology. At least 400 institutions now offer courses in computer graphics—from New York's Pratt Institute to UCLA, according to Steve Cunningham of the Special Interest Group on Graphics. (SIGGRAPH is a division of the New York-based Association for Computing Machinery, which serves as a clearinghouse for job information.) The number of schools that offer a full-fledged major in the subject remains relatively small, however; fewer than half a dozen, according to Cunningham. Most of the current degree programs exist only at the graduate level, although some schools are mulling undergraduate degrees. In the meantime, students continue to major in art or computer science as undergraduates—and many professionals believe that's probably wise. "A degree at the undergraduate level may be a little too specialized," says Judson Rosebush, the founder of Digital Effects and now president of Rosebush Visions Corp. "It's like a degree in Armenian."

A few educators believe that colleges

Susan Prager:
The School of Visual Arts

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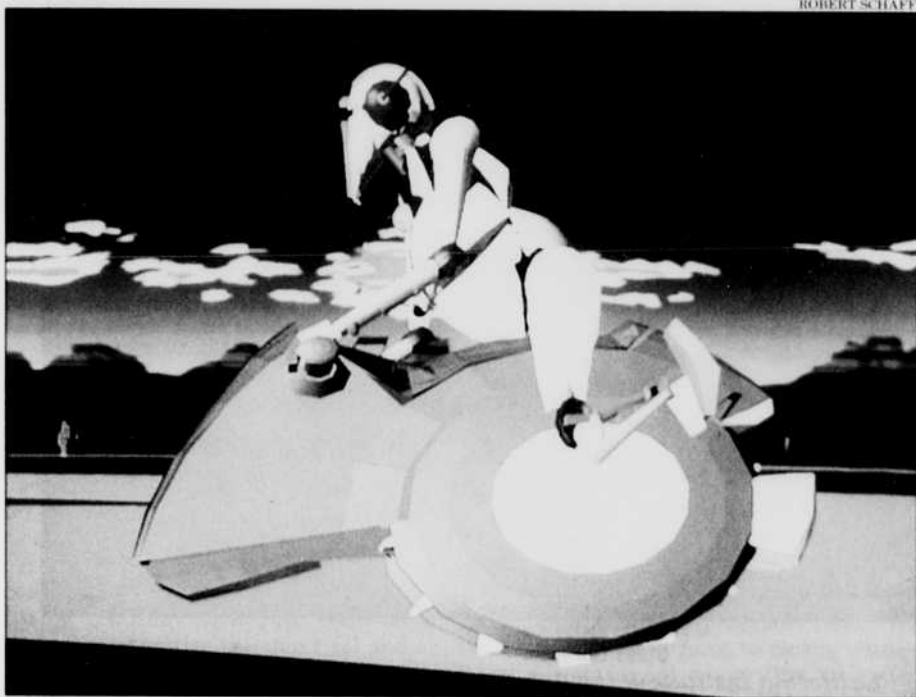


LISA SALLWASSER

Lisa Sallwasser:
The Art Institute of Chicago

Robert Schaff:
The College of Design

ROBERT SCHAFF



David Zeltzer:
Ohio State University

DAVID ZELTZER

