

CAD-CAM for Less Brass

mall-part machinists have known and loved (or hated) the Unimat series of tiny lathes and mills for more than 40 years. Medium-precision products from Austria, Unimat tools popularized table-top machining at realistic prices. I built an itsy-bitsy five-cylinder radial engine for one of my model planes with an old Unimat set. The whole motor was about two inches in diameter, and it worked – jewelry with moving parts. I must have worn out two sets of eyeglasses just reading the calipers as I worked.

The Unimat PC saves the eye strain. With all the bits and doodads you really need, and a garden variety computer in hand, you can be shredding aluminum, brass, plastic, or steel with computer



Render your dream: the Ultimat PC saves the eye strain.

control for about two grand. There's a third axismilling head available now, but the software is for the lathe only – so far.

Did I say software? Unimat's antediluvian programmers tried to do graphics without a mouse. It's klutzy and it's clumsy. But once you're set up to make that neat railing post for the doll house, making the next 47 of them is a snap. It's true CAD-CAM at less than half the price of anything else available.

A final note from the planned obsolescence department: The chucks and stuff from old Unimats mostly don't fit the new one. – Jef Raskin

Software and lathe: US\$2,000. Emco Maier Consumer Products Division: (800) 521 8289.

Morph's Outpost

S GUIDE

Pipeline. - Will Kreth •

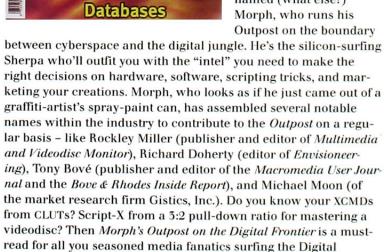
AUTHORING SYSTEMS

Building Multimedia

Don't knock programmers. Contrary to popular belief, many of them do have lives and look nothing like the bespectacled, pasty-faced, Jolt-cola-slurping traitorous overweight hacker depicted in *Jurassic Park* (personally, I was thrilled when he got eaten in the Jeep). Some of them ride mountain bikes, kayak, play alto sax and read books by Peter Matheissen. Some of them were never interested in programming until HyperCard, while others have been working on PCs since the birth of the Altair in the '70s. Until recently, they've been stuck wading through various patently dull programming magazines for the information they needed to stay on the edge.

The rise of interactive multimedia has given birth to a new crop of programmers, and they're starving for deep technical informa-

> tion about their current (albeit over-hyped) obsession. Now they have a new magazine dedicated to their cause. Morph's Outpost on the Digital Frontier is the brainchild of Craig LaGrow, a founder of the popular Computer Language, and Editor-in-Chief Doug Millison. Augmenting the magazine's seriously technical treatment of authoring environments and the like is a whimsical cartoon character named (what else?)



Morph's Outpost on the Digital Frontier: first issue free. +1 (510) 254 3145. (lagrow@holonet.net)

Da Vinci Would Dig It

ccasionally a landmark program will popularize buzz words, offer new techniques, or dramatically improve existing tools. Sometimes a program will offer an entirely new approach to a problem. Fractal Design Painter 2.0 does all of this. It's high on wow factor and solid as well. And though Fractal built it for the graphics professional, it's priced for the starving artist.

Painter's extensive controls and support for pressure-sensitive tablets allow precise emulation of natural media and the mixing of media to create uncommon effects. Lighting effects are realistic, liquid effects are drippy. The paper textures affect the way



High wow factor.

a brush applies color just as real textured paper would. Using the cloning feature, you create an image with your own brush strokes that's based on a scanned photo or other image. This type of cloning creates a much more convincing effect than a simple filter.

Painter's most important feature is its controls for brush styles and strokes. The brush selection includes colored pencil and chalk, charcoal, oil paint, and water color. You can vary a brush's size, pressure variability, tip shape, texture, opacity, graininess, edge softness, build-up, drippiness, and a host of other attributes. If Leonardo were here today, he'd have been a beta tester.

- Chris Allain

Fractal Design Painter: US\$399. Fractal Design: (800) 647 7443, +1 (408) 688 8800.