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Education **Georgia Institute of Technology, Atlanta, Georgia**
BS in Computer Science June 1998 (Expected)
Cumulative GPA: 3.9

Honors **Michael A. J. Sweeney Best Student Paper (*Graphics Interface '98*)**
Most Outstanding Rising Senior (1997)
Undergraduate Research Internship Program (1997)
Martin Marietta Scholarship (1995)
Florida Engineering Society Scholarship (1994)

University Research Experience **Animation Lab (10/96 - Present)**
I work for Dr. Jessica Hodgins in her Animation Lab, which is part of the Graphics, Visualization, and Usability Lab at Georgia Tech. My research with Dr. Hodgins is motivated by the observation that computer-generated animations are often conspicuously clean and lack the rich details of the real world. Under her support, I have developed a simulation model of ground surfaces such as sand, mud, and snow that can be deformed by the impact of rigid body animated characters. A research paper about our work has been accepted to the conference *Graphics Interface* and selected as the *Michael Sweeney Best Student Paper*.

New York University Media Research Lab (Summer 1996)
I worked for Dr. Ken Perlin in the Media Research Lab helping to create a demonstration of his research for Siggraph 96, the annual computer graphics conference. Dr. Perlin's research involves the creation of autonomous 3D animated characters that populate virtual worlds. I created a tool that links "Alias," a popular animation package, with Dr. Perlin's system. My tool allows an animator to more easily create a repertoire of actions or moves for a character.

Graphics, Visualization, and Usability Lab (10/94 - 6/96)
I worked as a research assistant for Dr. Bill Ribarsky on the *Glyphmaker* project in the Gvu Lab at Georgia Tech. Our team's goal was to create a set of tools that addresses the needs of groups of scientists working on large, time-dependent simulations. My role in this research was the development of a renderer that exploits graphics hardware to rapidly display thousands of interactive objects.

Work Experience **Teaching Assistant (Fall, Spring, Winter quarters, 1996)**
I worked as a teaching assistant for a 2000-level undergraduate class entitled *Control and Concurrency*. The class is taught using the C programming language. Major topics include TCP/IP, sockets, pipes, and shells.

Fuji-Keizai U.S.A., Inc. (10/94 - 12/95)
Fuji-Keizai U.S.A., Inc. is a subsidiary of one of Japan's largest market research and consulting companies. I have completed market research projects for Fuji-Keizai involving high-end scientific visualization packages and high-end video products.

CSX Technology (Summer 1994, Summer 1995)
I developed four stand alone applications under OS/2. The largest of these applications was a project tracking program that provided a front end for much of the information stored in CSX's mainframe. Programming was done in C++ and graphical interfaces were created using IBM's user interface class library.

Publications Robert W. Sumner, James F. O'Brien, and Jessica K. Hodgins. Animating Sand, Mud, and Snow. To appear in *Proceedings of Graphics Interface '98*. Canadian Information Processing Society, June 1998.

Song Zou, William Ribarsky, Yves Jean, Jeremy Heiner, K. Schwan, Robert Sumner, and Onome Okuma. Collaboration and visual steering of simulations. In *Visual Data Exploration and Analysis IV*, volume 3017, pages 274-285. SPIE - The International Society for Optical Engineering, April 1997.