CURRICULUM VITAE

Petros Faloutsos

Personal

Date of birth :	26th May 1970
Nationality :	Greek and Canadian
Languages :	Greek, English, French
E-mail contact:	pfal@dgp.toronto.edu
Professional memberships:	ACM, Technical Chamber of Greece (Professional Engineers)

Education

- **Ph.D.**, 1995 - present. "Composable Controllers For Physics-based Character Animation", Department of Computer Science, University of Toronto, Canada. Advisors: Michiel van de Panne and Demetri Terzopoulos. Expected spring 2001.
- **MSC**, 1993 - 1995. "Physics-Based Animation and Control of Flexible Characters", Department of Computer Science, University of Toronto, Canada. Advisors: Michiel van de Panne and Demetri Terzopoulos.
- **BA,** 1988 - 1993. Department of Electrical and Computer Engineering, National Technical University of Athens, Greece.

Academic Interests

- Computer graphics.
- Physics-based animation.
- Robotics, control and animation of articulated characters.
- Modelling and simulation of deformable characters.

My PhD work involves the physics-based animation and control of human-like simulated characters and lies within the areas of graphics, biomechanics, and robotics. My master's thesis resulted into a system that combines physics-based techniques for the animation and control of flexible characters.

Honors and Awards

- Connaught Scholarship (1994,1995,1996) a prestigious scholarship offered by the School of Graduate Studies of the University of Toronto.
- University of Toronto Open Fellowship (1993), along with a Differential Fee Waiver for international students.
- Annual awards for being in the top ten of the class (1988, 1989, 1991), NTUA Greece.

Papers/Publications

Refereed Journals

1. "Dynamic Animation Synthesis with Free-Form Deformations", Petros Faloutsos, Michiel van de Panne and Demetri Terzopoulos, IEEE Transactions on Visualization and Computer Graphics, vol 3, number 3, July-September 1997.

Refereed Conferences

1. "Composable Controllers for Character Animation", Petros Faloutsos, Michiel van de Panne and Demetri Terzopoulos, Los Angeles, August, SIGGRAPH 2001.
2. "Learning Controller Preconditions for Physics-based Character Animation," (extended abstract), P. Faloutsos, M. van de Panne, D. Terzopoulos, *Proc. of the Learning Workshop*, Snowbird, UT, April, 2001.
3. "Dynamic Human Simulation: Towards Agile Animated Characters", Michiel van de Panne, Joe Laszlo, Pedro Huang, Petros Faloutsos, International Conference on Robotics and Automation 2000, San Francisco, CA.
4. "On Power-Law Relationships of the Internet Topology", Michalis Faloutsos, Petros Faloutsos, Christos Faloutsos, ACM SIGCOMM'99, Cambridge, Massachussets,pp 251-262, 1999.
5. "BIVTECI: A Bibliography Visualization Tool", David Modjeska, Vassilis Tzerpos, Petros Faloutsos, Michalis Faloutsos, CASCON '96, CD-ROM proceedings, Toronto, Ontario.

Refereed Posters and Presentations

1. "Dynamic Animation and Control Environment",Victor Ng-Thow-Hing, Petros Faloutsos, Technical Sketch, SIGGRAPH 2000, New Orleans.
2. "Dynamic Animation and Controller Environment", Victor Ng-Thow-Hing, Petros Faloutsos, poster presented in Graphics Interface'99, Kingston, Ontario.
3. "Composeable Controllers for Physically-based Character Animation", Petros Faloutsos, Michiel van de Panne, poster presented in Graphics Interface'99, Kingston, Ontario.

To be submitted

1. "Power-laws and the Internet Topology", Michalis Faloutsos, Petros Faloutsos, Christos Faloutsos and Georgos Siganos, IEEE Transactions on Networking.

Technical reports

1. "Composeable Controllers for Physically-based Character Animation", Petros Faloutsos, Michiel van de Panne, Demetri Terzopoulos. Technical report 418, 1999.
2. "Physics-Based Animation and Control of Flexible Characters", CSRI Technical report 326.

Work experience

02/98-06/98 **Lead graphics-engine developper** at Zoesis Inc, Boston, MA.
Implemented a commercial quality graphics engine for a large project involving the animation of believable autonomous agents. My salary was the equivalent of $80,000 USD per year.

96-98 **Systen administrator** at the University of Toronto.
Part time system administrator at the graphics lab. I was responsible for a complex network of workstations running Linux, Solaris, SunOS, and SGI-Irix operating systems.

92-93 **Software engineer** at Intrasoft SA.
Designed and implemented a graphical visualization of a telemedecine session, running on ATM broadband network infrastructure.

Software Projects

- **DANCE.** I have developed DANCE jointly with colleague Victor Ng-Thow-Hing. DANCE is written in C++ and its source code is available free for non-commercial use. DANCE provides a common environment for all researchers in the area of animation and control to share and exchange results. It has been successfully used as a teaching and research tool in a variety of ways.
- **Graphics Engine.** During my employment at Zoesis Inc. I have implemented an object oriented graphics engine that produces the low level motion of autonomous agents which are driven by sophisticated AI components. The complete commercial product can be seen at "http://www.thelivingletters.com".
- **Lagrange dynamics simulator.** I have developed a physics-based simulator for flexible objects based on Lagrangian dynamics.

Teaching Experience:

I have been a teaching assistant for the following courses:

1. "UNIX tools and C", (csc209), January '95 and January '96, UofT.
2. "Computer Graphics", (csc418/csc2504), both a graduate and an undergraduate course, September '94 and September '95, UofT.
3. "Data and File Management" (csc228), January 94, UofT, Toronto, Canada.
4. "Programming Techniques" September '90, NTUA, Greece.

I have co-supervised a summer student's project during the summer of 2000.

Note: Copies of the papers, associated animations and additional personal information can be found at "http://www.dgp.toronto.edu/∼pfal/pfal.html".