

## David H. Salesin

January 2000

### *Current positions*

[Microsoft Research](#), Senior Researcher, since 1999.

[University of Washington](#), [Department of Computer Science and Engineering](#). Associate Professor, since 1996.

### *Degrees*

PhD 1991, [Stanford University](#) (Advisor: [Leonidas Guibas](#))

ScB magna cum laude 1983, [Brown University](#)

### *Experience*

[University of Washington](#), [Department of Computer Science and Engineering](#). Assistant Professor, 1991-96.

[Cornell University](#), Program of Computer Graphics. Visiting Assistant Professor, 1991-92.

[Digital Equipment Corporation](#). Student intern at Paris Research Lab, 1988; at [Systems Research Center](#), summers 1989-90.

[Pixar](#). Computer graphics researcher, summer 1987.

[Stanford University](#). Research assistant, 1986-88; teaching fellow in computer graphics, 1988.

[Sogitec](#) Audiovisuel, Paris. Computer graphics consultant, 1986.

[Lucasfilm, Ltd.](#) Computer graphics researcher, 1983-85.

### *Selected honors*

[The Carnegie Foundation for the Advancement of Teaching](#) and the [Council for the Advancement and Support of Education](#) [1998-1999 Washington Professor of the Year Award](#).

[University of Washington Distinguished Teaching Award](#), 1997.

[University of Washington](#) Award for Outstanding Faculty Achievement in the College of Engineering, 1996.

[National Science Foundation Presidential Faculty Fellow Award](#), 1995-98.

[Alfred P. Sloan](#) Research Fellowship, 1995-97.

[Office of Naval Research](#) Young Investigator Award, 1995-98.

[National Science Foundation](#) Young Investigator Award, 1993-95.

### *Selected review committees and editorial boards*

[SIGGRAPH](#) Papers Committee, 1995, 1996, 1998, 2000.

[IEEE Transactions on Visualization and Computer Graphics](#). Editorial board member, since 1999.

[The Journal of Graphics Tools](#). Founder and Consulting Editor, since 1995.

[Computers and Graphics](#). Editorial advisory board member, 1992-98.

### *Selected SIGGRAPH papers*

[Environment matting and compositing](#), with D. Zongker, D. Werner, and B. Curless. Proceedings of SIGGRAPH 99, 205-214, August 1999.

[Synthesizing realistic facial expressions from photographs](#), with F. Pighin, J. Hecker, D. Lischinski, and R. Szeliski. Proceedings of SIGGRAPH 98, 75-84, July 1998

[Reproducing color images using custom inks](#), with E. Stollnitz and V. Ostromoukhov. Proceedings of SIGGRAPH 98, 267-274, July 1998.

[Computer-generated floral ornament](#), with M. Wong, D. Zongker. Proceedings of SIGGRAPH 98, 423-434, July 1998.

[Multiperspective panoramas for cel animation](#), with D. Wood, A. Finkelstein, J. Hughes, and C. Thayer. Proceedings of SIGGRAPH 97, 243-250, August 1997.

[Orientable textures for image-based pen-and-ink illustration](#), with M. Salisbury, M. Wong, and J. F. Hughes. Proceedings of SIGGRAPH 97, 401-406, August 1997.

[Computer-generated watercolor](#), with C. J. Curtis, S. E. Anderson, J. E. Seims, and K. W. Fleischer. Proceedings of SIGGRAPH 97, 421-430, August 1997.

[Hierarchical image caching for accelerated walkthroughs of complex environments](#), with J. Shade, D. Lischinski, T. DeRose, and J. Snyder. Proceedings of SIGGRAPH 96, 75-82, August 1996.

[Interactive multiresolution surface viewing](#), with A. Certain, J. Popovic, T. DeRose, T. Duchamp, and W. Stuetzle. Proceedings of SIGGRAPH 96, 91-98, August 1996.

[The virtual cinematographer: a paradigm for automatic real-time camera control and directing](#), with L. He and M. Cohen. Proceedings of SIGGRAPH 96, 217-224, August 1996.

[Comic chat](#), with D. Kurlander and T. Skelly. Proceedings of SIGGRAPH 96, 225-236, August 1996.

[Reproducing color images as duotones](#), with J. L. Power, B. S. West, and E. J. Stollnitz. Proceedings of SIGGRAPH 96, 237-248, August 1996.

[Multiresolution video](#), with A. Finkelstein and C. Jacobs. Proceedings of SIGGRAPH 96, 281-290, August 1996.

[Scale-dependent reproduction of pen-and-ink illustrations](#), with M. Salisbury, C. Anderson, and D. Lischinski. Proceedings of SIGGRAPH 96, 461-468, August 1996.

[Rendering parametric surfaces in pen and ink](#), with G. Winkenbach. Proceedings of SIGGRAPH 96, in *Computer Graphics Proceedings*, 469-476, August 1996.

[Fast multiresolution image querying](#), with C. E. Jacobs and A. Finkelstein. Proceedings of SIGGRAPH 95, 277-286, August 1995. Reprinted in *Investing in the Future: 1946-1996*, commemorating the 50th anniversary of the Office of Naval Research, 48-57, 1996.

[Computer-generated pen-and-ink illustration](#), with G. Winkenbach. Proceedings of SIGGRAPH 94, in *Computer Graphics Proceedings*, 91-100, July 1994.

[Interactive pen-and-ink illustration](#), with M. Salisbury, S. Anderson, and R. Barzel. Proceedings of SIGGRAPH 94, 101-108, July 1994.

[Multiresolution curves](#), with A. Finkelstein. Proceedings of SIGGRAPH 94, 261-268, July 1994.

[Multiresolution painting and compositing](#), with D. Berman and J. Bartell. Proceedings of SIGGRAPH 94, 85-90, July 1994.

[An importance-driven radiosity algorithm](#), with B. Smits and J. Arvo. *Computer Graphics* 26(2): 273-282, 1992. Presented at SIGGRAPH '92.

Rendering CSG models with a ZZ-buffer, with J. Stolfi. *Computer Graphics* 24(4): 67-76, 1990. Presented at SIGGRAPH '90.

Rendering antialiased shadows with depth maps, with W. Reeves and R. Cook. *Computer Graphics* 21(4): 283-291, 1987. Presented at SIGGRAPH '87.

#### ***Other selected publications***

Resynthesizing facial animation through 3D model-based tracking, with F. Pighin and R. Szeliski. Proceedings of the Seventh IEEE International Conference on Computer Vision (ICCV '99, Kerkyra, Greece), 143-150, 1999.

Interactive arrangement of botanical L-system models, with J. L. Power, A. J. B. Brush, and P. Prusinkiewicz. Proceedings of the 1999 Symposium on Interactive 3D Graphics (Atlanta), 175-182, 1999.

[Clustering for glossy global illumination](#), with P. H. Christensen, D. Lischinski, and E. J. Stollnitz. *ACM Transactions on Graphics* 16(1): 3-33, January 1997.

[Wavelets for Computer Graphics: Theory and Applications](#), with E. Stollnitz and T. DeRose. Morgan-Kaufmann Publishers, Inc., San Francisco, 1996. ISBN 1-55860-375-1.

[Declarative camera control for automatic cinematography](#), with D. Christianson, S. E. Anderson, L. He, D. S. Weld, and M. F. Cohen. Proceedings of AAAI '96 (Portland, Oregon), 148-155, 1996.

[Global illumination of glossy environments using wavelets and importance](#), with P. Christensen, E. Stollnitz, and T. DeRose. *ACM Transactions on Graphics* 15(1): 37-71, January 1996.

Constructing strongly convex approximate hulls with inaccurate primitives, with L. Guibas and J. Stolfi. *Algorithmica* 9(6): 534-560, 1993.

Adjustable tools: An object-oriented interaction metaphor, with R. Barzel. *ACM Transactions on Graphics* 12(1): 103-107, 1993.

Epsilon Geometry: Building robust algorithms from imprecise computations, with L. Guibas and J. Stolfi. Proceedings of the 5th Annual Symposium on Computational Geometry (Saarbruchen, Germany), 208-217, 1989.

Two-bit graphics, with R. Barzel. *IEEE Computer Graphics and Applications* 6(6): 36-42, 1986.

DIAL: A diagrammatic animation language, with S. Feiner and T. Banchoff. *IEEE Computer Graphics and Applications* 2(7): 43-54, 1982.