

## H. (Harvard) Scott Hinton

Utah State University

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### Personal Data

Age - 62 (Born November 18, 1951)

Height - 6'4"

Weight - 270 lbs.

Married with eight children

### Education

Purdue University: MSEE, 1981-1982

Brigham Young University: BSEE, 1977-1981

Utah Technical College at Provo: AAS, 1971-1973

Southern Utah State College: 1970-1971

### Work Experience

#### *Utah State University*

- President, USU Research Foundation, 2013 –

- Dean, College of Engineering, 2002 – 2013

- Director, USTAR Synthetic Biomanufacturing Institute, 2013 –

- Interim Director, USTAR Synthetic Biomanufacturing Institute, 2012 – 2013

- Adjunct Professor, BE Department, 2008 -

- Professor, ECE Department, 2002 -

#### *University of Kansas*

- Chair, Electrical Engineering and Computer Science Dept. and Deane E. Ackers Distinguished Professor, 1999 – 2002.

#### *University of Colorado at Boulder*

- Hudson Moore Jr. Professor, 1994-1999

#### *McGill University*

- Professor: BNR-NT/NSERC Professor of Photonic Systems, 1992-94

#### *AT&T Bell Laboratories*

- Director of Technology Planning (Part-time), 1992

- Department Head - Photonic Switching Department, 1989-1992

- Supervisor - Photonic Switching Technologies Group, 1985-1989

- Member of the Technical Staff, 1981-1985

#### *Illinois Institute of Technology*

- Instructor (Part-time), 1983-1989

#### *Brigham Young University*

- Instructor, 1979-1981

- Teaching Assistant, 1978-1979

- Electronic Technician, 1977-1978

#### *Lockheed, Missiles and Space Division*

- Associate Engineer, 1979 (Summer)

#### *Motorola, Government Electronics Division*

- Technician, 1973-1975

#### *Sperry Univac*

- Technician, 1972-1973

### Honors

- Distinguished Service Award, IEEE Photonics Society, 2012

- John and Olga Gardner Prize awarded by the Utah Academy of Sciences, Arts, and Letters (2011)

- USU Diversity Award (2010/2011)

- USU Vice Provost of Regional Campuses and Distance Education Award (2009)

- Fellow - IEEE (1998)

- Fellow - Optical Society of America (1997)

- IEEE LEOS Distinguished Lecturer (1993-94)

- AT&T Exceptional Contribution Award for Extraordinary Contribution to the Protection of Intellectual Property (1986)

- Honorable Mention, 1986 Eta Kappa Nu Young Outstanding Engineer Award

- Together for Greatness Scholarship, Brigham Young University (1980-1981)

- Outstanding Student in Electronics at Utah Technical College at Provo (1973)

### Committee & Leadership Assignments

- USU USTAR Executive Committee (2010-)

- USU USTAR Facilities Management Subcommittee (2010-2012)

- USU Budget Reduction Committee (2009-2011)

- IEEE-LEOS Awards Chair (2008-2011)

- Board of Directors - Agile All-Photonic Networks (AAPNs) – McGill University (2007- 2008)

- OSA Nick Holonyak Jr. Award Committee (2006-2008)

- IEEE-LEOS Past President (2006-2007)

- OSA Goodman Book Writing Award Committee (2005-2008)

- Chairman of the search committee for the Provost and Executive Vice President of USU (2005)

- IEEE-LEOS President (2004-2005)

- IEEE-LEOS President-elect (2003)

- IEEE Information Technology Ad Hoc Committee (2003)

- IEEE Information Technology Strategy Ad Hoc Committee (2003)
- Board of Directors - University of Kansas e-Learning Design Lab (2002-2012 )
- USU Research Foundation Board of Trustees (2002 -)
- IEEE Education Activities Board (2002-2003 )
- Co-director: University of Kansas e-Learning Design Lab (2001-2002)
- IEEE-LEOS Annual Meeting Program Committee (2000-2003)
- IEEE-LEOS Vice President of Conferences (1999 - 2002 )
- IEEE-LEOS Editor for Electronic Services (2000 - 2007)
- Chairman of the LEOS Meetings Strategic Planning Committee (1998-2001)
- Member of the IEEE-LEOS Fellows Committee (1999).
- LEOS Annual Meeting Program Committee (1999)
- Chairman of the IEEE-LEOS Electronic Services Subcommittee (1998-99).
- Chairman of the IEEE-LEOS Meetings Subcommittee (1998-2000).
- Elected IEEE-LEOS Board of Governors (1998-2001)
- North American Editor - International Journal of Optoelectronics (1995-1998)
- 1997 Chairman of the Optical Computing Technical Subcommittee for the Optical Society of America.
- Program Chairman for the 1997 IEEE International Conference on Massively Parallel Processing using Optical Interconnections (Montreal, Canada)
- Chairman for the 1996 Topical Meeting on Smart Pixels
- Chairman for the 1995 Topical Meeting on Optical Computing
- Committee Member of the 1994 Topical Meeting on Optical Computing (Edinburgh, UK)
- Program Chairman for the 1994 IEEE LEOS Topical Meeting on Smart Pixels.
- Chairman of the Optical Switching, Logic, and Storage Subcommittee for CLEO'94
- Advisory Editor for the Information Processing Division of Applied Optics. (1993)
- Chairman of IEEE LEOS Optical Switching and Processing Subcommittee (1993-96 )
- Committee Member of DARPA Consortium for Optical and Optoelectronic Technologies in Computing Smart Pixels Working Group (1992)
- Committee Member of the 1992 IEEE LEOS Topical Meeting on Smart Pixels.
- Committee Member of ICO Optical Computing Steering Committee (1992)
- Program Committee for CLEO'93
- Committee Member of IEEE LEOS Optical Switching and Processing Subcommittee (1991-93)
- Program Committee for 1993 OSA Annual Meeting (Organized Symposium on Smart Pixels)
- Committee Member IEEE COMSOC Gigabit Networking Technical Committee (1992 - 93)
- Program Chairman for the 1993 Topical Meeting on Optical Computing
- Program Co-Chairman for the 1992 Topical Meeting on Photonic Switching (Minsk, Byerussia)
- Program Committee for 1992 OSA Annual Meeting (Organized Symposium on Smart Pixels)
- Program Committee for 1992 Topical Meeting on Smart Pixels
- Program Committee for 1992 Symposium on Optoelectronic Packaging Science.
- Program Committee for CLEO'92
- Program Committee for 1991 OSA Annual Meeting (Organized Symposium on Smart Pixels)
- Candidate for the IEEE LEOS Board of Governors (1991)
- Program Committee for ECOC'91
- Advisory Board of National Center for Integrated Photonic Technology (1990)
- Chairman of the Chicago Chapter of the IEEE LEOS (1989-90)
- Chairman for the 1991 Topical Meeting on Photonic Switching
- Program Committee for the 1991 Topical Meeting on Optical Computing
- Program Co-Chairman for the 1990 Topical Meeting on Photonic Switching (Japan)
- Program Co-Chairman for the 1989 Topical Meeting on Photonic Switching
- Technical Advisory Committee for the University of Illinois Engineering Research Center (1988-1992)
- Vice-Chairman of the Chicago Chapter of the IEEE LEOS (1988-89)
- Program Committee for the 1987 Topical Meeting on Photonic Switching
- Program Co-Chairman of the Workshop on Issues in Free-Space Optical Processing, March 4, 1989.
- IEEE Communications Society Switching Committee (1987)
- Chairman of the Joint Subcommittee on Photonic Switching for Optical Communications Committee and the Switching Committee of the IEEE Communications Society (1987-89)
- Program Chairman for the Workshop on the Applications of Optical Components in Switching, January 18, 1987, Reno, Nevada
- Program Chairman for AT&T Photonic Switching Symposiums (1984, 1985, 1986, 1987, 1988, 1989)

**Patents**

- Patent Number: 6,016,211, "Optoelectronic Smart Pixel Array for a Reconfigurable Intelligent Optical Interconnect," January 18, 2000, (Co-inventor).

- Patent Number: 5,195,103, "Externally Modulated Laser Source for Array Illumination," March 16, 1993 (Co-inventor).
- Patent Number: 5,077,483, "Network Topology For Reduced Blocking and Photonic System Implementation Thereof," December 31, 1991 (Co-inventor).
- Patent Number: 4,952,791, "Monolithic Apparatus Comprising Optically Interconnected Quantum Well Devices," August 28, 1990 (Co-inventor).
- Patent Number: 4,830,444, "Optical Switch," May 16, 1989 (Co-inventor).
- Patent Number: 4,790,017, "Speech Processing Feature Generation Arrangement," December 6, 1988
- Patent Number: 4,764,890, "Optical Logic Arrangement," August 16, 1988
- Patent Number: 4,764,889, "Optical Logic Arrangement with Self Electro-Optic Effect Devices," August 16, 1988 (Co-inventor)
- Patent Number: 4,751,378, "Optical Device with Quantum Well Absorption," June 14, 1989 (Co-inventor).
- Patent Number: 4,754,132, "Symmetric Optical Device with Quantum Well Absorption," June 28, 1988 (Co-inventor).
- Patent Number: 4,705,344, "Optical Interconnection Arrangement," November 10, 1987 (Co-inventor).
- Patent Number: 4,703,993, "Method and Apparatus for Making a Device for Optically Interconnecting Optical Devices," November 3, 1987 (Co-inventor).

#### Books

1. Ray T. Chen and H. Scott Hinton, Editors, *Optoelectronic Interconnects III*, SPIE Volume 2400, 1995.
2. H. S. Hinton, J. R. Erickson, T. J. Cloonan, F. A. P. Tooley, F. B. McCormick, and A. L. Lentine, *An Introduction to Photonic Switching Fabrics*, Plenum Publishing, 1993.
3. A. Marrakchi, *Photonic Switching and Interconnects*, Marcel Dekker, Inc., 1993.
4. H. S. Hinton, *Optical Logic Elements, Section in The Electrical Engineering*, edited by R. C. Dorf, CRC Press, Inc, 1993.
5. H. S. Hinton, J. R. Erickson, T. J. Cloonan, and G. W. Richards, "Space-Division Switching," *Photonics in Switching*, J. E. Midwinter ed., Academic Press, 1993.
6. *OSA Proceedings on Photonic Switching*, H. Scott Hinton and J. W. Goodman, eds. (Optical Society of America, Washington, D. C.), 1991.
7. F. B. McCormick, F. A. P. Tooley, T. J. Cloonan, J. M. Sasian, and H. S. Hinton, "Microbeam Optical Interconnections Using Microlens Arrays," *OSA Proceedings on Photonic Switching*, H. Scott

- Hinton and J. W. Goodman, eds. (Optical Society of America, Washington, D. C.), 1991.
8. H. S. Hinton, "Systems Based on S-SEEDs and Free-Space Digital Optics (Invited)," *OSA Proceedings on Nonlinear Dynamics in Optical Systems*, N. B. Abraham, ed. (Optical Society of America, Washington, D. C.), 1991.
9. *Photonic Switching II*, K. Tada and H. S. Hinton eds., Springer-Verlag, 1990.
10. H. S. Hinton et al, "Photonic Switching Fabrics Based on S-SEED Arrays," *Photonic Switching II*, K. Tada and H. S. Hinton eds., Springer-Verlag, 1990, pp. 30-39.
11. *IEEE Reprints on Photonic Switching*, H. S. Hinton and John E. Midwinter eds., 1990.
12. H. S. Hinton, "Photonic Switching and Optical Computing Based on Free-Space Digital Optics," *Digital Optical Computing II*, Ed. R. Arrathoon, SPIE, Vol. 1215, pp. 132-142. 1990.
13. *OSA Proceedings on Photonic Switching*, John E. Midwinter and H. Scott Hinton, eds. (Optical Society of America, Washington, D. C.), Vol. 3, 1989.
14. H. S. Hinton, "Optical Time-Switching Systems," *Optical Technology and Wideband Local Networks*, J. E. Midwinter, W. A. Gambling, C. J. Todd, and W. J. Stewart, eds., The Royal Society, 1989, pp. 93-104.
15. H. S. Hinton, "Relationship Between the Hardware Required for Photonic Switching and Optical Computing Based on Free-Space Digital Optics," *OSA Proceedings on Photonic Switching*, John E. Midwinter and H. Scott Hinton, eds. (Optical Society of America, Washington, D. C., 1989), Vol. 3, pp. 184-191.
16. H. S. Hinton, "Photonic Switching in Communication Systems," *Optical Bistability IV*, W. Firth, N. Peyghambarian, and A. Tallet, eds., Journal De Physique, 1988, pp. C2-5 to C2-10.
17. W. A. Payne and H. S. Hinton, "System Considerations for the Lithium Niobate Photonic Switching Technology," *Photonic Switching*, T. K. Gustafson and P. W. Smith, eds., Springer-Verlag, 1988, pp. 196-199.

#### Journals

1. E. L. Meyen, R. Aust, J. M. Gauch, H. S. Hinton, R. E. Issacson, S. J. Smith, and M. Y. Tee, "e-Learning: A Programmatic Research Construct for the Future," *Journal of Special Education Technology*, Vol. 17, Number 3, Summer 2002, pp. 37-46.
2. Hess Hodge, H. Scott Hinton, and Michael Lightner, "Virtual Circuit Laboratory," *ASEE Journal of Engineering Education*, October, 2001, pp. 507-511.

3. H. Scott Hinton, Roberto Gonzalez, Laura L. Tedder, Sandeep Karandikar, Harpreet Behl, Paul C. Smith, John Wilbanks, James Humphrey, Murray Gordon, and Michael Lightner, "A Technology-Enhanced Learning Environment For A Graduate/Undergraduate Course On Optical Fiber Communications," *ASEE Journal of Engineering Education*, October, 2001, pp. 513-518.
4. S. S. Sherif, S. K. Griebel, A. Au, D. Hui, T. H. Szymanski, and H. S. Hinton, "Field-programmable smart pixel arrays: design, VLSI implementation, and application," *Applied Optics*, vol. 38, no. 5, 10 February, 1999, pp. 838-846.
5. T. H. Szymanski and H. S. Hinton, Architecture of a Terabit Free-space Intelligent Optical Backplane, *Journal of Parallel and Distributed Computing*, Academic Press, Vol. 55, pp. 1-31, 1998
6. Y. Liu, B. Robertson, D.V. Plant, H. S. Hinton, and M. Robertson, Design and characterization of a microchannel optical interconnect for backplanes, by Y. Liu, B. Robertson, D.V. Plant, H. S. Hinton, and M. Robertson, *Applied Optics*, vol 36, no. 14, pp. 3127 - 3141, (1997).
7. H. S. Hinton, "Guest Editorial: Smart Pixels," *International Journal of Optoelectronics*, Vol. 11, No. 3, May-June 1997, pp. 153-154.
8. H. S. Hinton, "Progress in the Smart Pixel Technologies," *IEEE Journal on Selected Topics in Quantum Electronics*. Vol. 2, No.1, April 1996, pp. 14-23.
9. D. J. Goodwill, K. D. Devenport, and H. S. Hinton, "An ATM-Based Intelligent Optical Backplane Using CMOS-SEED Smart Pixel Arrays and Free-Space Optical Interconnect Modules," *IEEE Journal on Selected Topics in Quantum Electronics*. Vol. 2, No.1, April 1996, pp. 85-96.
10. D.R. Rolston, D.V. Plant, T.H. Szymanski, H.S. Hinton, W.S. Hsiao, M.H. Ayliffe, D. Kabal, M.B. Venditti, A.V. Krishnamoorthy, K.W. Goossen, J.A. Walker, B. Tseng, S.P. Hui, J.C. Cunningham, and W.Y. Jan, "A Hybrid-SEED Smart Pixel Array for a Four-Stage Intelligent Optical Backplane Demonstrator," *IEEE Journal on Selected Topics in Quantum Electronics*. Vol. 2, No.1, April 1996, pp. 97-105.
11. D.V. Plant, B. Robertson, H.S. Hinton, M.H. Ayliffe, G.C. Boisset, W. Hsiao, D. Kabal, N.K. Kim, Y.S. Liu, M.R. Otazo, D. Pavlasek, A.Z. Shang, J. Simmons, K. Song, D.A. Thompson, and W.M. Robertson. "4x4 Vertical-Cavity-Surface-Emitting Laser (VCSEL) and Metal-Semiconductor- Metal (MSM) Optical Backplane Demonstrator System," *Applied Optics*, Vol. 35, pp. 6365-6368 (1996).
12. D.R. Rolston, B. Robertson, H.S. Hinton, and D.V. Plant, "Analysis of a Microchannel Interconnect Based on the Clustering of Smart-Pixel-Device Windows," *Applied Optics* Vol. 35, No. 8, March 10, 1996, pp. 1220-1233.
13. D.V. Plant, A.Z. Shang, M.R. Otazo, D.R. Rolston, B. Robertson, and H.S. Hinton, "Design, Modeling, and Characterization of FET-SEED Smart Pixel Transceiver Arrays for Optical Backplanes," *IEEE J. Quantum. Electronics*, Vol. 32, No. 8, August 1996, pp. 1391-1398.
14. T. H. Szymanski, and H. S. Hinton, "Reconfigurable Intelligent Optical BackPlane for Parallel Computing and Communications", *Applied Optics*, Vol. 35, No. 8, March 10, 1996, pp. 1253-1268.
15. D.V. Plant, B. Robertson, H.S. Hinton, W. M. Robertson, G. C. Boisset, N. H. Kim, Y. S. Liu, M. R. Otazo, D. R. Rolston, and A. Z. Shang, "An Optical Backplane Demonstrator System Based on FET-SEED Smart Pixel Arrays and Diffractive Lenslet Arrays," *Photonics Technology Letters*, Vol. 7, No. 9, September 1995, pp. 1057-1060.
16. G. C. Boisset, B. Robertson, H. S. Hinton, "Design and Construction of an Active Alignment Demonstrator for a Free-space Interconnect," *Photonics Technology Letters*, Vol. 7, No. 6, June 1995, pp. 676-679.
17. H. S. Hinton, T. J. Cloonan, F. B. McCormick, A. L. Lentine, and F. A. P. Tooley, "Free-space Digital Optical Systems," *Proceedings of the IEEE*, vol. 82, no. 11, pp. 1632-1649, November 1994.
18. H. S. Hinton, F. A. P. Tooley, B. Soffer, and K. Yukimatsu, Editors, *Special Issue on Optical Computing*, *Applied Optics*, 1994.
19. S. R. Forrest and H. S. Hinton, Editors, Special Issue on Smart Pixels, *IEEE Journal of Quantum Electronics*, Vol. 29, No. 2, February 1993.
20. T. J. Cloonan, G. W. Richards, A. L. Lentine, F. B. McCormick, H. S. Hinton, and S. J. Hinterlong, "A complexity analysis of smart pixel switching nodes for photonic extended generalized shuffle switching networks," *Journal of Quantum Electronics*, Vol. 29, No. 2, February 1993, pp. 619-634.
21. H. S. Hinton, "Multiple quantum-well technology takes SEED (Invited)," *Circuits and Devices*, Vol. 9, No. 2, March, 1993, pp. 12-18.
22. H. S. Hinton, "Photonics in Switching (Invited)," *IEEE Lightwave Telecommunications Systems*, August 1992, pp. 26-35.
23. H. S. Hinton and J. E. Midwinter, Editors, Special Issue on Optical Interconnects, *Optical and Quantum Electronics*, Vol. 24, No. 4, April 1992.
24. F. B. McCormick, F. A. P. Tooley, T. J. Cloonan, J. M. Sasian, and H. S. Hinton, "Optical Interconnections Using Microlens Arrays," *Optical*

- and *Quantum Electronics*, Vol. 24, No. 4, April, 1992, pp. S443-S464.
25. H. S. Hinton and D. A. B. Miller, "Free-Space Photonics In Switching," *AT&T Technical Journal*, Vol. 71, No. 1, January, 1992, pp. 84-92.
  26. H. S. Hinton and D. A. B. Miller, "Photonic switching based on free-space digital optics," *AT&T Trends in Telecommunications*, Vol. 8, No. 1, March 1992, pp. 43-52.
  27. H. S. Hinton, "Switching to Photonics," *IEEE Spectrum*, Vol. 29, No. 2, pp. 42-45, February 1992.
  28. H. S. Hinton, "Photonic Switching Fabrics," *IEEE Communications Magazine*, Vol. 28, No. 4, pp. 71-89, April 1990.
  29. A. L. Lentine, H. S. Hinton, D. A. B. Miller, J. E. Henry, J. E. Cunningham, and L.M. F. Chirovsky, "Symmetric Self-Electro-Optic Effect Device: Optical Set-Reset Latch, Differential Logic Gate, and Differential Modulator/Detector," *IEEE Journal of Quantum Electronics*, Vol. 25, No. 8, August, 1989, pp. 1928-1936.
  30. H. S. Hinton, "Photonic Time-Division Switching Systems," *IEEE Circuits and Devices Magazine*, Vol. 5, No. 4, July 1989, pp. 39-43.
  31. H. S. Hinton, "Architectural Considerations for Photonic Switching Networks (Invited)," *IEEE Journal of Selected Areas in Communications*, vol. 6, pp. 1209-1226, August, 1988.
  32. A. L. Lentine, H. S. Hinton, D. A. B. Miller, J. E. Henry, J. E. Cunningham, and L.M. F. Chirovsky, "Symmetric Self-Electro-Optic Effect Device: Optical Set-Reset Latch," *Applied Physics Letters*, Vol. 52, No. 17, April 25, 1988, pp. 1419-1421.
  33. H. S. Hinton, "Photonic Switching Technology Applications," *AT&T Technical Journal*, Vol. 66, Issue 3, May/June 1987, pp. 41-53.
  34. H. S. Hinton, "Photonic Switching Connects to the Future," *Telecommunications*, May 1987, pp. 79-85.
  35. H. S. Hinton, "Photonic Switching Using Directional Couplers," *IEEE Communications Magazine*, May 1987, Vol. 25, No. 5, pp. 16-26.
  36. W. A. Payne and H. S. Hinton, "Design of Lithium Niobate Photonic Switching Systems," *IEEE Communications Magazine*, May 1987, Vol. 25, No. 5, pp. 37-41.
  2. Sumit Kumar Singh, Harsh Dosi, Vipul Oswal, Nicholas S. Flann; H. Scott. Hinton, "Pathway Pioneer: a tool for metabolic network visualization and flux analysis (poster)," 2014 IBE Annual Meeting, March 6-8, 2014, Lexington, Kentucky.
  3. Nicholas S. Flann, Jonathan Valiente, Misty Wallace, Richard Brown, Scott Hinton, "Pathway Pioneer: A Web-based Network Visualization and Flux Analysis Tool," 2013 IBE Annual Meeting, March 7-9, 2013, Raleigh, NC.
  4. Angela Dixon, Ronald C. Sims, Charles D. Miller, and H. Scott Hinton, "Designing predictive mathematical models for the metabolic pathways associated with polyhydroxybutyrate synthesis in *Escherichia coli*," Institute of Biological Engineering 17th Annual Conference, Indianapolis, IN, March 1-3, 2012.
  5. Charles D. Miller, Cody Tramp, Alex Hatch, Cole Peterson, Brad Henrie, Shujie Shen, Abiezer Tejada, Eduardo Monzon, H. Scott Hinton, and Ronald Sims, "CyanoBricks: Genomic Engineering Tools for the Photosynthetic Cyanobacterium *Synechocystis*," Institute of Biological Engineering 2011 Annual Conference, Atlanta, GA, March 3-5, 2011.
  6. J. Huo, R. C. Sims, and H. S. Hinton, "Design of a gene expressions system for *Rhodobacter sphaeroides*," Institute of Biological Engineering 2010 Annual Conference, Cambridge, MA, March 4-6, 2010.
  7. H. Scott Hinton, "Research Entrepreneur Model for Monitoring the Progress of Faculty Research Programs," AC 2009-619, ASEE Annual Conference, Austin, TX, June 14 - 17, 2009.
  8. Elisabeth Linton, Trent Mortensen, Ronald C. Sims, H. Scott Hinton, and Charles D. Miller, "Efficient Systems for Monitoring and Recovering Polyhydroxyalkanoates" Institute of Biological Engineering 2009 Annual Conference, Santa Clara, CA, March 19-21, 2009 (Poster).
  9. Nancy Kinnersley, Scott Mayhew, and H. Scott Hinton, "The Design Of A Web-Based Computer Proficiency Examination," 31<sup>st</sup> ASEE/IEEE Frontiers in Education Conference, Reno, NV, October 10 – 13, 2001, pp. F2C1-F2C2.
  10. Hess Hodge, H. Scott Hinton, and Michael Lightner, "Virtual Circuit Laboratory" 30<sup>th</sup> ASEE/IEEE Frontiers in Education Conference, Kansas City, MO, October 18 – 21, 2000.
  11. H. Scott Hinton, Roberto Gonzalez, Laura L. Tedder, Sandeep Karandikar, Harpreet Behl, Paul C. Smith, John Wilbanks, James Humphrey, Murray Gordon, and Michael Lightner, "A Technology-Enhanced Learning Environment For A Graduate/Undergraduate Course On Optical Fiber Communications" 30<sup>th</sup> ASEE/IEEE Frontiers

### Conferences

1. Harsh Dosi, Sumit Kumar Singh, Nicholas S. Flann, H. Scott. Hinton, "Pathway Pioneer: A web-based metabolic network layout tool for comprehensive visualization of complex networks," 2014 IBE Annual Meeting, March 6-8, 2014, Lexington, Kentucky.

- in *Education Conference*, Kansas City, MO, October 18 – 21, 2000.
12. H. S. Hinton, "Smart Pixel Circuits and Architectures for Switching and Processing", *OSA1998 Spring Topical Meeting on Optics in Computing*, July 23, 1998, Monterey, CA.
  13. B. E. Angliss and H. S. Hinton, "A Dynamically Reconfigurable Token-based Optical Backplane", *OSA 1998 Spring Topical Meeting on Optics in Computing*, July 23, 1998, Monterey, CA.
  14. H. S. Hinton, "System Trends for Optical Interconnects (Invited)," *Experts Workshop on Optical Interconnects, OIDA sponsored workshop*, October 17, 1997.
  15. S. K. Griebel, M. Richardson, K. E. Devenport, H. S. Hinton, "Experimental Performance of an ATM-based Buffered HyperPlane CMOS-SEED Smart Pixel Array," *SPIE Photonics West 1997 Optoelectronic Interconnects and Packaging*, February 11-14, 1997, San Jose, CA.
  16. B. E. Angliss and H. S. Hinton, "A Token Based Dynamically Reconfigurable Optical Backplane", *OSA 1997 Spring Topical Meeting on Optics in Computing*, March 18-21, 1997, Lake Tahoe, Nevada.
  17. Brian E. Angliss and H. Scott Hinton, "Intelligent Optical Backplanes", *Asia-Pacific Conference on Communications*, December 7-10, 1996, Sydney, New South Wales, Australia
  18. D.R. Rolston, D.V. Plant, H.S. Hinton, W.S. Hsiao, M.H. Ayliffe, D.N. Kabal, T.H. Szymanski, A.V. Krishnamoorthy, K.W. Goossen, J.A. Walker, B. Tseng, S.P. Hui, J.C. Cunningham, and W.Y. Jan, "Design and Testing of a Smart Pixel Array for a Four-Stage Optical Backplane Demonstrator", *IEEE LEOS Topical Meeting on Smart Pixels*, August 5-9, 1996, Keystone CO, pp. 30-31.
  19. K. E. Devenport, H. S. Hinton, and D. J. Goodwill, "A HyperPlane Smart Pixel Array for Packet-based Switching," *IEEE LEOS Topical Meeting on Smart Pixels*, August 5-9, 1996, Keystone CO, pp. 32-33.
  20. S. S. Sherif, T. H. Szymanski, and H. S. Hinton, "A HyperPlane Smart Pixel Array for Packet-based Switching," *IEEE LEOS Topical Meeting on Smart Pixels*, August 5-9, 1996, Keystone CO, pp. 78-79.
  21. D. J. Goodwill and H. S. Hinton, "Optical Interconnect Module Extensible to 10,000 Parallel Channels for a Smart-pixel Optical Backplane," *IEEE LEOS Topical Meeting on Smart Pixels*, August 5-9, 1996, Keystone CO, pp. 61-62.
  22. K. E. Devenport and H. S. Hinton, "A Buffered ATM HyperPlane Smart Pixel Array," *IEEE LEOS Topical Meeting on Smart Pixels*, August 5-9, 1996, Keystone CO, pp. 99-100.
  23. D. V. Plant, B. Robertson, H.S. Hinton, M.H. Ayliffe, G.C. Boisset, D.J. Goodwill, D.N. Kabal, R. Iyer, Y.S. Liu, D.R. Rolston, W.M. Robertson, and M.R. Taghizadeh, "A Multistage CMOS-SEED Optical Backplane Demonstration System", *Optical Computing 96*, pp. 14-15, Sendai, Japan, April 21-25, 1996.
  24. H. S. Hinton, "Progress in the Smart Pixel Technologies (Invited)", *Optical Computing '96*, pp. 74-75, Sendai, Japan, April 21-25, 1996.
  25. H. S. Hinton, K. E. Devenport, D. V. Plant, and T. H. Szymanski, "Intelligent Optical Backplanes", *Proceedings of the IEEE International Solid State Circuits Conference (ISSCC)*, 1996.
  26. T. H. Szymanski and H. S. Hinton, "Design of a Terabit Free-Space Photonic Backplane for Parallel Computing", *Proceedings of the IEEE International Conference on Massively Parallel Processing using Optical Interconnects*, San Antonio, Texas, October 20, 1995.
  27. H. S. Hinton and T. H. Szymanski., "Intelligent Optical Backplanes", (Invited Paper), *Proceedings of the IEEE International Conference on Massively Parallel Processing using Optical Interconnects*, San Antonio, Texas, October 20, 1995.
  28. D.V. Plant and H.S. Hinton, "Optical Backplane Demonstrators Using Micro-Optics and FET-SEED Smart Pixel Transceiver Arrays," *Proceedings of the IEEE International Phoenix Conference on Computers and Communications*, pp. 179-183 (1995).
  29. G.C. Boisset, B.R. Robertson, W. Hsiao, D.V. Plant, and H.S. Hinton, "Detection of X-Y Misalignment Error Using Optical Cross Talk in a Lenslet Array Based Free-Space Optical Link," *Technical Digest of the OSA Topical Meeting on Optical Computing*, pp. 62-64 (1995).
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