David Lon Page, PhD

EDUCATION

Doctorate of Philosophy, Electrical Engineering, The University of Tennessee, May 2003.
Imaging, Robotics and Intelligent Systems Laboratory
Computer Vision and Image Processing
Dissertation: Part Decomposition of 3D Surfaces
Advisor: Dr. Mongi Abidi

Master of Science, Electrical Engineering, Tennessee Technological University, May 1995.
Thesis: Tomographic Methods for Resolving the Constant of Integration Problem
Advisor: Dr. Jeff Austen

Bachelor of Science, Electrical Engineering, Tennessee Technological University, May 1993.
Focus: Signal Processing, Telecommunications, and Digital Systems
Magna Cum Laude

ONLINE

LinkedIn `https://www.linkedin.com/in/gopage`

ResearchGate `https://www.researchgate.net/profile/David_Page5`

WORK EXPERIENCE

Oak Ridge National Laboratory — Oak Ridge, Tennessee
Computational Sciences & Engineering
Scientist — **April 2016 – Present**

Third Dimension Technologies, LLC — Knoxville, Tennessee
Chief 3D Software Architect, Program Manager — **April 2008 – April 2016**

The University of Tennessee — Knoxville, Tennessee
Imaging, Robotics, and Intelligent Systems
Research Assistant Professor — **June 2003 – April 2008**

The University of Tennessee — Knoxville, Tennessee
Imaging, Robotics, and Intelligent Systems
Graduate Research Assistant — **May 1998 – May 2003**

The University of Tennessee — Knoxville, Tennessee
Electrical and Computer Engineering
Graduate Teaching Assistant — **August 1997 – May 1998**

Naval Surface Warfare Center — Dahlgren, Virginia
Electronics Engineer — **August 1995 – August 1997**

Tennessee Technological University — Cookeville, Tennessee
Graduate Research and Teaching Assistant — **August 1993 – May 1995**

United States Space Camp — Huntsville, Alabama
Team Leader — **May 1992 – August 1992**

Oak Ridge National Laboratory — Oak Ridge, Tennessee
Cooperative Education Student — **1988 – 1989, 1990 – 1991**

	Finalist "What's the Big Idea?", Knoxville Entrepreneur Center, Tennessee, 2015. **30 for 30 Entrepreneur**, Leadership Knoxville, Tennessee, 2014. **Quarterfinalist EntreVision**, The Legacy Center, Knoxville, Tennessee, 2014. **National Innovation Award**, TechConnect, (four-man company award), 2013. **Community Columnist**, News Sentinel (Circulation 150,000), Knoxville, Tennessee, 2007–2008. **Outstanding Research Faculty Award**, IRIS Lab, The University of Tennessee, January 2004. **Sigma Xi Research Presentation Award**, The University of Tennessee, March 2001. **Performance Award**, Naval Surface Warfare Center, 1996, 1997. **MLK, Jr., Oratorical Contest**, Tennessee Technological University, *Third Place*, February 1994. **Derryberry Award**, Tennessee Technological University, May 1993. **Engineering Joint Council Senior Award**, Tennessee Technological University, May 1993. **American Legion Boys and Girls County**, Sullivan County, *County Executive*, 1987. **American Legion Boys State**, Tennessee, *Sullivan County Delegate*, Summer 1986. **Excellence in Academics and Athletics Award**, U.S. Army Reserve, 1987. **Student-Athlete All-Academic Team**, Sullivan County, 1987.

Memberships	**Institute of Electrical and Electronics Engineers**, Professional Society, *Member*. **Phi Kappa Phi**, Academic Honor Society, *Member*. **Tau Beta Pi**, Engineering Honor Society, *Member*. **Eta Kappa Nu**, Electrical Engineering Honor Society, *Member*. **Omicron Delta Kappa**, Leadership Honor Society, *Member*. **Order of the Engineer**, Engineering Society, *Member*. **Mortar Board**, Senior Honor Society, *Member*.

Community Service	**Tate's School of Discovery**, Knoxville, Tennessee, *Science Fair Judge*, 2001–2007, 2013–2015. **Upward Soccer**, Central Baptist Church, Knoxville, Tennessee, *Assistant Coach*, 2013, 2014. **GlenLake Homeowners**, Knoxville, Tennessee, *Board of Directors*, 2008–2013. **Charter Review Committee**, Knox County, Tennessee, *Sixth District Representative*, 2012. **McNair National Scholars Conference**, SAEOPP-UTK, Knoxville, Tennessee, *Judge*, 2007. **Teacher Workshop**, IEEE, Knoxville, Tennessee, *Volunteer Engineer*, 2006. **Campus Bowling League**, The University of Tennessee, Knoxville, *President*, 2006. **Knoxville Flag Football League**, Tennessee, *Coach*, Recreation division champions, 2005. **Order of the Engineer**, The University of Tennessee, Knoxville, *Assistant Coordinator*, 2005. **U.S. FIRST Robotics Team**, Webb School of Knoxville, Tennessee, *Team Director*, 2004. **U.S. FIRST Robotics Team**, South Doyle High School, Tennessee, *Assistant Director*, 2003. **Robotics Club**, Oliver Springs High School, Tennessee, *Mentor*, Spring 2000. **King George Youth Athletics**, King George, Virginia, *Assistant Coach*, 1995–1996. **Believer's Because Youth Choir**, Dahlgren, Virginia, *Skit Director*, 1995–1997. **Lighthouse Christian Summer Camp**, Smithville, Tennessee, *Volunteer Counselor*, 1988–1995. **InterVarsity Christian Fellowship**, Cookeville, Tennessee, *Fellowship Coordinator*, 1993. **Club Soccer Team**, Tennessee Technological University, *President*, 1993. **Engineering Joint Council**, Tennessee Technological University, *IEEE Representative*, 1992. **Buildings and Grounds Committee**, Tennessee Technological University, *Representative*, 1992. **Student Orientation Leader**, Tennessee Technological University, *Volunteer*, 1988–1992. **U.S. Special Olympics**, Cookeville, Tennessee, *Soccer Referee*, 1989, 1991. **InterVarsity Christian Fellowship**, Cookeville, Tennessee, *Small Group Leader*, 1989, 1991. **Minority Engineering Camp**, Tennessee Technological University, *Counselor*, 1988, 1990.

Professional Activities	**Invited and Selected Presentations** • "Holograms and Digital 3D Displays – The Art and the Magic", Virtual and Augmented Reality Developers Network, Knoxville Entrepreneur Center, Knoxville, Tennessee, October 2015.

- "The Ins & Outs of a High-Tech Startup," Webb School of Knoxville, Junior Achievement, Knoxville, Tennessee, February 2013.
- "The Magic of 3D Movies," Tate's School of Discovery, Knoxville, Tennessee, September 2012.
- "Human Vision vs. Computer Vision: How Robots See and Think," Knoxville Nova Science Cafe, Knoxville, Tennessee, April 2011.
- "The future of engineering," Pre-College Summer Program, Engineering Diversity, Knoxville, Tennessee, June 2007.
- "How do robots think?" Tate's School of Discovery, Knoxville, Tennessee, January 2007.
- "Homeland security through video-based sensing and unmanned systems," Tennessee Homeland Security Consortium, Nashville, Tennessee, July 2006.
- "Modular sensors for perimeter security and chain-of-custody surveillance," Y-12 PDRD Conference, Pollard Center, Oak Ridge, Tennessee, April 2006.
- "Organizational skills: negotiation and management," ECE 400 Senior Design, The University of Tennessee, Knoxville, November 2005.
- "Modular robotics," Junior Seminar, The University of Tennessee, Knoxville, September 2005.
- "Shape analysis and multi-sensor fusion for 3D automotive component analysis," Automotive Research Center, The University of Michigan, Ann Arbor, June 2005.
- "Simulation and data processing of large scale multi-sensor networks in national and homeland security scenarios," Partners in Technology, Oak Ridge Associated Universities, Oak Ridge, Tennessee, April 2005.
- "Ethics: the little things matter," ECE 400 Senior Design, The University of Tennessee, Knoxville, April 2005.
- "Homeland security through robotics," Junior Seminar, The University of Tennessee, Knoxville, November 2004.
- "Image processing and 3D computer vision," Junior Seminar, The University of Tennessee, Knoxville, November 2003.
- "Making the future safer through 3D computer vision research," CIS Seminar, Rochester Institute of Technology, New York, October 2003.
- "Modeling in 3D with laser-based range scanners," Laboratoire Électronique Informatique et Image, Dijion, France, September 2003.
- "Reverse engineering of automotive components," Automotive Research Center, The University of Michigan, Ann Arbor, July 2003.
- "Preparing for graduate school," Graduate Studies Seminar, Tennessee Technological University, Cookeville, April 2003.

Past Student Supervising
- Sreenivas Rangan, Dissertation Committee Member, Chancellor's Citation for Professional Promise, *Assisted Dr. Mongi Abidi in advising until April 2008*, Doctor of Philosophy Student.
- Chung-Hao Chen, Dissertation Committee Member, *Assisted Dr. Mongi Abidi in advising until April 2008*, Doctor of Philosophy Student.
- Chang Cheng, Dissertation Committee Member, *Assisted Dr. Mongi Abidi in advising until April 2008*, Doctor of Philosophy Student.
- Wei Hao, Dissertation Committee Member, *Assisted Dr. Mongi Abidi in advising until April 2008*, Doctor of Philosophy Student.
- Marcus Jackson, Thesis Committee Member, *Assisted Dr. Mongi Abidi in advising until April 2008*, Master of Science Student.

- Sophie Voisin, Dissertation Committee Member, *Assisted Dr. Mongi Abidi in advising until April 2008*, Visiting Scholar (France), Doctor of Philosophy Student.

- Nikhil Naik, "Design, development and characterization of a thermal sensor brick system for modular robotics," Thesis Committee Member, *Assisted Dr. Mongi Abidi in advising*, Master of Science, Thesis, December 2006.

- Julie Morris, "Design of an active stereo vision 3D scene reconstruction system based on the linear position sensor module," Thesis Committee Member, *Assisted Dr. Mongi Abidi in advising*, Master of Science, Thesis, August 2006.

- Roselyne Barreto, "Migration from teleoperation to autonomy via modular sensor and mobility bricks," Thesis Committee Member, *Assisted Dr. Mongi Abidi in advising*, Master of Science, Thesis, May 2006.

- Allen Kemp, "Utilization of cellular networks for mobile robotics and sensor control," Committee Member, *Assisted Dr. Mongi Abidi in advising*, Master of Science, Project in Lieu of a Thesis, May 2006.

- Tom Wilson, "A comparison of the sensor brick concept as a modular system architecture to the realtime control system as the operational architecture," Thesis Committee Member, *Assisted Dr. Mongi Abidi in advising*, Master of Science, Thesis, December 2005.

- Sijie Yu, "Digitizing and 3D modeling of road surfaces using an integrated multisensory approach," *Assisted Dr. Mongi Abidi in advising*, Master of Science, Project in Lieu of a Thesis, December 2005.

- Sreenivas Rangan, "Curvature variation as a measure of shape information," Thesis Committee Member, *Assisted Dr. Mongi Abidi in advising*, Master of Science, Thesis, December 2004.

- Matt Schultz, "Multiple view 3D reconstruction of micro- to nano-scopic specimens," Thesis Committee Member, *Assisted Dr. Mongi Abidi in advising*, Master of Science, Thesis, December 2004.

- Balaji Ramadoss, "Hardware and software development of a wireless imaging system for under vehicle inspection robot," *Assisted Dr. Mongi Abidi in advising*, Master of Science, Project in Lieu of a Thesis, December 2003.

McNair Scholar Supervising

- Rashad Smith, "Operator control unit for modular robotics," McNair Scholar, Outstanding Research Methods Award,
Summer 2005.

- Charles Lively, "Foreground and background segmentation of range images," McNair Scholar, Exemplary Scholar Award, Outstanding Technical Presentation Award,
Summer 2003.

- LaTonya Baker, "3D laser range camera calibration," McNair Scholar, Outstanding Technical Presentation Award,
Summer 1999.

Program Committees

- ANS Winter Meeting, DOE University Research Program in Robotics, Alternate Chair, 2007.

- IEEE Southeastern Symposium on System Theory, Technical Program Committee, 2006.

Journal Reviewer

- IEEE Transactions on Image Processing

- IEEE Transactions on Pattern Analysis and Machine Intelligence

- IEEE Transactions on Visualization and Computer Graphics

- IEEE Signal Processing Letters

- SPIE Optical Engineering
- Computer Aided Design
- Eurographics Computer Graphics Forum
- Journal of Electronic Imaging
- Remote Sensing of Environment
- International Journal of Shape Modeling
- Graphical Models

Conference Reviewer
- IEEE International Conference on Image Processing
- ACM SIGGRAPH Conference

Training, Workshops, and Courses Attended
- NIH SBIR/STTR Proposal Prep, Center for Innovative Technology (CIT), Andrea Johanson, PhD BBC, Charlottesville, Virginia, September 16-18, 2014.
- KY SBIR/STTR Phase I Proposal Preparation Workshop - NIH Focus, Kentucky Science and Engineering Foundation (KSEF), Lisa Kurek, BBC, Louisville, Kentucky, June 11-12, 2013.
- SBIR Proposal Prep, Mark Henry, Oak Ridge, Tennessee, September 18, 2012.
- SBIR Proposal Prep, Mark Henry, Louisville, Kentucky, May 30-June 1, 2012.
- NIH SBIR/STTR Hands-on Proposal Writing Workshop, Nancy Fischer and Jim Peterson, Chapel Hill, North Carolina, October 22-23, 2010.
- SBIR Competitive Checklist Workshop and NASA Submission Tips, John Davis, Langley, Virginia, August 21, 2009.
- Scalable University on Multi-Projector Design, Scalable Display Technologies, Orlando, Florida, March 12, 2009.
- SBIR Phase I Cost Proposal Writing Seminar, Jim Greenwood, Oak Ridge, Tennessee, September 11, 2008.
- SBIR Phase I Technical Proposal Writing Seminar, Jim Greenwood, Chattanooga, Tennessee, September 10, 2008.
- SBIR Phase I Proposal Writing Seminar, Lisa Kurek, Research Triangle Park, North Carolina, June 12, 2008.
- Leadership UT, The University of Tennessee, Dr. Lee Martin, Spring 2006.
- Crime Scene Investigation, Knoxville Police Department, Tennessee, March 2006.
- ANDROS Operation and Maintenance Training, Remotec Inc., Oak Ridge, Tennessee, April 2004.
- Robotics Team Workshop, U.S. FIRST Robotics, New Hampshire, December 2003.
- Segway Operation Training, Segway, Inc., New Hampshire, October 2003.
- Graduate Teaching Assistant Mentoring Program, The University of Tennessee, 2001–2002.

PUBLICATIONS   Lead author and co-author on more than 50 refereed publications that appear in international conferences and journals. Detailed list of publications appears below.

| Book Chapters | D. Page, A. Koschan, M. Abidi, "Methodologies and techniques for reverse engineering: The potential for automation with 3D laser scanners," in *Reverse Engineering: An Industrial Perspective*, V. Raja, K. Fernandes (Eds.), Springer, London, UK, pp. 11–32, October 2007. |

S. Sukumar, D. Page, A. Koschan, M. Abidi, "Under vehicle inspection with 3D imaging," in *Safety and Security in 3D*, Series: Computational Imaging and Vision, Vol. 35, A. Koschan (Eds.), Springer, pp. 249–279, September 2007.

Refereed Journals

C. Cheng, A. Koschan, C.-H. Chen, D. Page, and M. Abidi, "Outdoor Scene Image Segmentation Based on Background Recognition and Perceptual Organization", *IEEE Transactions on Image Processing*, Vol. 21, No. 3, pp. 1007–1019, March 2012.

C.-H. Chen, Y. Yao, D. Page, B. Abidi, A. Koschan, and M. Abidi, "Camera handoff with adaptive resource management for multi-camera multi-object tracking", *Image and Vision Computing*, Vol. 28, No. 6, pp. 851-864, June 2010.

C.-H. Chen, Y. Yao, D. Page, B. Abidi, A. Koschan, and M. Abidi, "Camera handoff and placement for automated tracking systems with multiple omnidirectional cameras", *Computer Vision and Image Understanding*, Vol. 114, No. 2, pp. 179–197, February 2010.

Y. Yao, C.-H. Chen, B. Abidi, D. Page, A. Koschan, and M. Abidi, "Can you see me now? Sensor positioning for automated and persistent surveillance" *IEEE Transactions on Systems, Man, and Cybernetics, Part B*, Vol. 40, No. 1, pp. 101-115, 2010.

C.-H. Chen, Y. Yao, D. Page, B. Abidi, A. Koschan, and M. Abidi, "Comparison of image compression methods using objective measures towards machine recognition", *International Journal of Information Analysis and Processing*, Vol. 1, No. 2, pp. 63–74, October 2008.

C.-H. Chen, Y. Yao, D. Page, B. Abidi, A. Koschan, and M. Abidi, "Heterogeneous fusion of omnidirectional and PTZ cameras for multiple object tracking", *IEEE Transactions Circuits and Systems for Video Technology*, Vol. 18, No. 8, pp. 1052–1063, August 2008.

D. Page, A. Koschan, M. Abidi, R. Michaels, and D. McDonald, "Novel x-ray imaging and segmentation of root structures", *Sensor Review*, Vol. 28, No. 1, pp. 46–51, February 2008.

S. Sukumar, D. Page, A. Gribok, A. Koschan, M. Abidi, D. Gorsich, and G. Gerhart, "A robotic 3D imaging system for under vehicle inspection", *Journal of Electronic Imaging*, Vol. 15, No. 3, 033008, 2006.

Z. Chen, B. Abidi, D. Page, M. Abidi, "Gray-level grouping (GLG): An automatic method for optimized image contrast enhancement—Part I: The basic method", *IEEE Transactions on Image Processing*, Vol. 15, No. 8, pp. 2290–2302, August 2006.

Z. Chen, B. Abidi, D. Page, M. Abidi, "Gray-level grouping (GLG): An automatic method for optimized image contrast enhancement—Part II: The variations", *IEEE Transactions on Image Processing*, Vol. 15, No. 8, pp. 2303–2314, August 2006.

D. Page, A. Koschan, S. Voisin, N. Ali, M. Abidi, "CAD model generation of mechanical parts using coded-pattern projection and laser triangulation Systems", *Assembly Automation*, Special issue on Machine Vision, Vol. 25, No. 3, August 2005.

A. Koschan, D. Page, J. Ng, M. Abidi, D. Gorsich, G. Gerhart, "SAFER under vehicle inspection applying video mosaicking", *International Journal of Industrial Robot*, Special Issue on Robotics in the Military and Aerospace Industries, Vol. 31, No. 5, September 2004.

D. Page, A. Koschan, Y. Sun, Y. Zhang, J. Paik, M. Abidi, "Towards computer-aided reverse engineering of heavy vehicle parts using laser range imaging techniques", *International Journal of Heavy Vehicles*, Special issue, Vol. 11, No. 2/3, pp. 434–4512, 2004.

D. Page, A. Koschan, Y. Sun, M. Abidi, "Laser-based Imaging for Reverse Engineering", *Sensor Review*, Special issue on Machine Vision and Laser Scanners, Vol. 23, No. 3, pp. 223–229, July 2003.

D. Page, Y. Sun, A. Koschan, J. Paik, M. Abidi, "Normal vector voting: crease detection and curvature estimation on large, noisy meshes", *Graphical Models*, Special issue on large triangle mesh models, Vol. 64, pp. 1–31, January 2003.

Y. Sun, J. Paik, A. Koschan, D. Page, M. Abidi, "Point's fingerprint: a new 3D object representation scheme for surface registration", *IEEE Transactions on Systems, Man, and Cybernetics, Part B*, Vol. 33, No. 4, pp. 712–717, August 2003.

D. Page and J. Austen, "Comparison of tomographic and conventional methods for resolution of the constant of integration", *Radio Science*, Special issue on ionosphere imaging, 32(4), pp. 1645–1656, July–August 1997.

| REFEREED CONFERENCES | D. Page, C. Thomas, S. Kelley, P. Jones, D. Miller, "Vergence and Accommodation in Simulation and Training with 3D Displays", *Proceedings of the Interservice/Industry Training, Simulation, and Education Conference, I/ITSEC 2014*, Orlando, Florida, November 2014. (Accepted as Oral & Written). |

C. Cheng, A. Koschan, D. Page, and M. Abidi, "Scene image segmentation based on perception organization", *Proceedings of the IEEE International Conference on Image Processing, ICIP 2009*, Cairo, Egypt, pp. 1801-1804, November 2009.

S. Sukumar, H. Bozdogan, D. Page, A. Koschan, and M. Abidi, "Uncertainty minimization in multi-sensor localization systems using model selection theory", *Proceedings of the IEEE International Conference on Pattern Recognition, ICPR 2008*, Tampa, Florida, December 2008.

Y. Yao, C.-H. Chen, B. Abidi, D. Page, A. Koschan, and M. Abidi, "Sensor planning for PTZ cameras using the probability of camera overload", *Proceedings of the IEEE International Conference on Pattern Recognition, ICPR 2008*, Tampa, Florida, December 2008.

S. Sukumar, H. Bozdogan, D. Page, A. Koschan, and M. Abidi, "Sensor selection using information complexity for multi-sensor robot localization" *Proceedings of the IEEE International Conference on Robotics and Automation, ICRA 2007*, pp. 4158–4163, Rome, Italy, April 2007.

S. Sukumar, D. Page, H. Bozdogan, A. Koschan, and M. Abidi, "MuFeSaC: Learning when to use which feature detector", *Proceedings of the IEEE International Conference on Robotics and Automation, ICRA 2007*, Vol. VI, pp. 149–152, San Antonio, Texas, August 2003.

C.-H. Chen, C. Cheng, D. Page, A. Koschan, and M. Abidi, "A moving object tracked by a moving robot with real-time obstacle avoidance", *Proceedings of the IEEE International Conference on Pattern Recognition, ICPR 2006*, Vol. III, Hong Kong, pp. 1091-1094, August 2006.

D. Page, A. Koschan, and M. Abidi, "Linking feature lines on 3D triangle meshes with artificial potential fields", in *Proceedings of the International Symposium on 3D Data Processing Visualization and Transmission, 3DPVT 2006*, Chapel Hill, NC, June 2006. (Conference received 190 paper submissions and accepted 28 as oral papers.)

D. Page, J. Overholt, A. Koschan, and M. Abidi, "Ridge-valley path planning for 3D terrains",

Proceedings of the IEEE International Conference on Robotics and Automation, ICRA 2006, pp. 119–124, Orlando, Florida, May 2006. (Conference received 1756 paper submissions and accepted 680 papers.)

D. Page, A. Koschan, S. Sukumar, B. Abidi, and M. Abidi, "Shape analysis algorithm based on information theory", *Proceedings of the IEEE International Conference on Image Processing, ICIP 2003*, Vol. I, pp. 229–232, Barcelona, Spain, September 2003.

D. Page, A. Koschan, M. Abidi, "Perception-based 3D triangle mesh segmentation using fast marching watersheds", *Proceedings of the IEEE International Conference on Computer Vision and Pattern Recognition, CVPR 2003*, Vol. II, pp. 27–32, Madison, Wisconsin, June 2003. (Conference received over 1000 paper submissions and accepted 188 papers.)

D. Page, Y. Sun, A. Koschan, J. Paik, M. Abidi, "Simultaneous mesh simplification and noise smoothing of range images", in *Proceedings of the IEEE International Conference on Image Processing, ICIP 2002*, Vol. III, pp. 821–824, September 2002.

Y. Sun, D. Page, A. Koschan, J. Paik, M. Abidi, "Triangle mesh-based edge detection and its application to surface segmentation and adaptive surface smoothing ", in *Proceedings of the IEEE International Conference on Image Processing, ICIP 2002*, Vol. III, pp. 825–828, September 2002.

Y. Sun, D. Page, J. Paik, A. Koschan, and M. Abidi, "Triangle mesh-based surface modeling using adaptive smoothing and implicit texture integration", in *Proceedings of the International Symposium on 3D Data Processing Visualization and Transmission, 3DPVT 2002*, pp. 588–597, 2002.

D. Page, Y. Sun, A. Koschan, J. Paik, M. Abidi, "Robust crease detection and curvature estimation of piecewise smooth surfaces from triangle mesh approximations using normal voting", in *Proceedings of the IEEE International Conference on Computer Vision and Pattern Recognition, CVPR 2001*, Oral, Vol. I, pp. 162–167, December 2001. (Conference received over 900 paper submissions and accepted 78 as oral papers and 273 papers total.)

OTHER PUBLICATIONS

Y. Yao, C.-H. Chen, B. Abidi, D. Page, A. Koschan, and M. Abidi, "Multi-Camera Positioning for Automated Tracking Systems in Dynamic Environments", *International Journal of Information Acquisition*, Vol. 7, No. 3, pp. 225–242, 2010.

S. Sukumar, P. Govindasamy, A. Koschan, D. Page, and M. Abidi, "Imaging-based thermal modelling and reverse engineering of as-built automotive components – A case study", *Virtual and Physical Prototyping*, Vol. 5, No. 1, pp. 21–32, March 2010.

Y. Yao, S. Sukumar, B. Abidi, D. Page, A. Koschan, and M. Abidi, "Automated scene-specific selection of feature detectors for 3D face reconstruction", in *Proceedings of the International Symposium on Visual Computing, ISVC 2007*, G. Bebis et al. (eds.), Lake Tahoe, NV, Part I, pp. 476-487, November 2007.

W. Hao, S. Huq, D. Page, B. Abidi, A. Koschan, and M. Abidi, "Nano-Scale 3D Metrology for Surface Characterization and Inspection of High-Precision Manufactured Components", ANS/ENS International Meeting, Washington, DC, November 11–15, 2007.

C.-H. Chen, Y. Yao, D. Page, B. Abidi, A. Koschan, and M. Abidi, "Video-Based Multi-Camera Automated Surveillance of High Value Assets in Nuclear Facilities", ANS/ENS International Meeting, Washington, DC, November 11–15, 2007.

H. Hariharan, A. Koschan, B. Abidi, D. Page, M. Abidi, J. Frafjord, and S. Dekanich, "Enhancing depth of field in LCSEM scenes by sharpness map partitioning", *Microscopy and Microanalysis*,

Vol. 13, Suppl. 2, pp. 1722–1723, August 2007.

S. Huq, B. Abidi, D. Page, and M. Abidi, J. Frafjord, and S. Dekanich, "Inspection of high magnification fracture surfaces using 3D from stereo images of large chamber SEM", *Microscopy and Microanalysis*, Vol. 13, Suppl. 2, Fort Lauderdale, FL, August 2007.

W. Hao, D. Page, B. Abidi, M. Abidi, J. Frafjord, and S. Dekanich, "Automated 3D modeling and analysis of metallic materials using multiple LC-SEM images", *Microscopy and Microanalysis*, Vol. 13, Suppl. 2, Fort Lauderdale, FL, August 2007.

S.-J. Yu, S. Sukumar, A. Koschan, D. Page, and M. Abidi, "3D Reconstruction of Road Surfaces Using an Integrated Multi-Sensory Approach", *Optics and Lasers in Engineering*, Vol. 45, No. 7, pp. 808–818, 2007.

B. Grinstead, S. Sukumar, D. Page, A. Koschan, D. Gorsich, and M. Abidi, "Mobile Scanning System for the Fast Digitization of Existing Roadways and Structures", *Sensor Review*, Vol. 26, No. 4, pp. 283-289, 2006.

C.-H. Chen, C. Cheng, D. Page, A. Koschan, and M. Abidi, "Modular robotics and intelligent imaging for unmanned systems", in *Proceedings of SPIE Unmanned Systems Technology VIII*, Vol. 6230, Orlando, FL, pp. 43–52, April 2006.

S. Sukumar, S.-J. Yu, D. Page, A. Koschan, and M. Abidi, "Multi-sensor integration for unmanned terrain modeling" in *Proceedings of SPIE Unmanned Systems Technology VIII*, Vol. 6230, Orlando, FL, pp. 65–74, April 2006.

B. Grinstead, A. Koschan, D. Page, and M. Abidi, "Model building for simulation and testing under uncertain conditions", in *Proceedings of SPIE Modeling and Simulation for Military Applications*, Vol. 6228, Orlando, FL, pp. 98–109, April 2006.

S. Voisin, D. Page, A. Koschan, and M. Abidi, "Reconstructing 3D CAD models for simulation using imaging-based reverse engineering", in *Proceedings of SPIE Modeling and Simulation for Military Applications*, Vol. 6228, Orlando, FL, pp. 54–62, April 2006.

C. Cheng, C.-H. Chen, D. Page, A. Koschan, M. Abidi, "Modular sensor processing for robotics-based security in hazardous environments", *Joint Emergency Preparation and Response, Robotic and Remote Systems Topical Meeting*, February 2006.

B. Grinstead, A. Koschan, D. Page, A. Gribok, and M. Abidi, "Vehicle-borne Scanning for detailed 3D terrain model generation", SAE (Society of Automotive Engineers) Commercial Vehicle Engineering Congress, Chicago, IL, November, 2005.

Z. Chen, Y. Zheng, B. Abidi, D. Page, and M. Abidi, "A combinational approach to the fusion, de-noising and enhancement of dual-energy x-ray luggage images", *Proceedings of the International Conference on Computer Vision and Pattern Recognition*, Workshop CDROM, June 2005.

S. Sukumar, D. Page, A. Gribok, A. Koschan, and M. Abidi, "Intelligent 3D sensing for robotic inspection of hazardous facilities", *Transactions of the American Nuclear Society*, Vol. 92, San Diego, California, pp. 54–55, June 2005.

S. Sukumar, D. Page, A. Gribok, A. Koschan, M. Abidi, D. Gorsich, and G. Gerhart, "Surface shape description of 3D data from under-vehicle inspection robot", *Proceedings SPIE Unmanned Ground Vehicle Technology VII*, Vol. 5804, Orlando, Florida, pp. 621–629, March 2005.

D. Page, C. Qian, A. Koschan, M. Abidi, "A Brick-Architecture-Based Mobile Scanning System For Real-Time Under-Vehicle Inspection", *Proceedings SPIE Unmanned Ground Vehicle Technology VII*, Vol. 5804, Orlando, Florida, pp. 182–190, March 2005.

D. Page, Y. Fougerolle, A. Koschan, A. Gribok, M. Abidi, D. Gorsich, G. Gerhart, "SAFER vehicle inspection: a multi-modal robotic sensing platform", *Proceedings of the SPIE Unmanned Ground Vehicle Technology*, Vol. 5422, Orlando, Florida, pp. 549–560, April 2004.

D. Page, M. Abidi, A. Koschan, Y. Zhang, "Object representation using the minima rule and superquadrics for under vehicle inspection" *Proceedings of the First IEEE Latin American Conference on Robotics and Automation*, pp. 91–97, Chile, November 2003.

M. Toubin, D. Page, C. Dumont, F. Truchetet, M. Abidi, "Multi-resolution wavelet analysis for simplification and visualization of multi-textured meshes", *Proceedings of the SPIE Visual Data Exploration and Analysis VII*, Vol. 3960, pp. 155–163, San Jose, California, January 2000.

F. Boughorbel, D. Page, C. Dumont, M. Abidi, "Registration and integration of multi-sensor data for photo-realistic scene reconstruction" *Proceedings of the SPIE Applied Imagery Pattern Recognition*, Vol. 3905, pp. 74–84, Washington, D.C., October 1999.

PATENTS

D. Page, C. Thomas Jr. "Systems and Methods for Convergent Angular Slice True-3D Display." U.S. Patent Application 14/033,273. March 27, 2014.

C. Thomas Jr., D. Page. "Systems and Methods for Alignment, Calibration and Rendering for an Angular Slice True-3D Display." U.S. Patent 9,357,206 B2. May 31, 2016.