# Vincent C. Paquit

CONTACT Information Imaging, Signals, and Machine Learning (ISML) GroupPhone: (865) 241-1789Oak Ridge National LaboratoryE-mail: paquitvc@ornl.govPO BOX 2008 MS-6075Citizenship: FranceOak Ridge, TN 37831-6075US Permanent Resident

BIOSKETCH

Dr. Vincent C. Paquit is a senior research scientist in the Electrical and Electronics Systems Research (EESR) Division at the Oak Ridge National Laboratory (ORNL) pursuing research and development efforts in the Computer Vision and Image Processing area, with a predilection for high performance image processing algorithm development. Before joining ORNL, he worked at the University of Burgundy (France) as an engineer in technology transfer for the Laboratoire Electronique Informatique Image (Le2i) for all commercial and technical applications in the fields of Electronic, Computer Science and Signal Processing. Since then, Dr. Paquit has been an active member of the Imaging, Signals, and Machine Learning (ISML) group, working on multiple projects and programs supporting two core missions of the Department of Energy: Energy sustainability and National Security. He is contributing to ORNL's scientific endeavor by conceiving, designing and implementing complex computer vision and multidimensional imaging systems - combining both hardware and software development - to perform quantitative analysis of complex datasets and/or to make quantitative measurement of various objects. Currently, Dr. Paquit is the Data Analytics lead for the Manufacturing Demonstration Facility (MDF). His team is developing a Data Analytics Framwork for Manufacturing aiming at better understanding additive manufacturing processes for the purpose of process certification and control. His research interests include applied signal and image processing, algorithm development on GPU platform, 2D and 3D image segmentation, multispectral and hyperspectral imaging, biomedical imaging, pattern recognition, remote sensing data understanding, and machine learning. He has published numerous peer-reviewed articles, one book chapter, submitted multiple invention disclosures, and served on program committees of several international conferences.

RESEARCH INTERESTS Signal Processing, Computer Vision, nD Image Processing, Multispectral Imaging, Modeling and Simulation, Pattern Recognition, Machine Learning, Imaging Systems Design (Software and Hardware), Additive Manufacturing, Remote Sensing, Electronics, Biomedical Imaging, Biometrics.

EDUCATION

#### Université de Bourgogne, Dijon, FRANCE

PhD in Computer Science and Image Processing (Summa Cum Laude), Département Informatique Électronique Mécanique, 2008

- Title: Quantitative Imaging of Subcutaneous Veins with Multispectral Illumination and 3D Modeling
- Advisor: Professor Fabrice Mériaudeau
- Co-Advisors: Dr. Kenneth W. Tobin Jr. and Dr. Jeffery R. Price (ORNL)
- Keywords: Biomedical Imaging, Multispectral Imaging, Signal and Image Processing, Artificial Vision, Machine Learning, Monte Carlo Simulation, 3D Reconstruction

M.S. in Computer Science and Image Processing (Magna Cum Laude), Département Informatique Électronique Mécanique, 2003

- Title: Pattern Recognition using Fourier Descriptors
- Advisor: Professor Johel Mitéran
- Keywords: Signal & Image Processing, Electronics, Pattern Recognition, Biometrics

B.S. in Electornics, Computer Science and Image Processing (Cum Laude), Département Informatique Électronique Mécanique, 2001

• Area of Study: Signal and Image Processing, Electronics

Professional EXPERIENCE

Image Science and Machine Vision Group, Oak Ridge National Laboratory Oak Ridge, Tennessee, USA August 2004 to present

For forteen years, I have been working on numerous applied image processing projects at ORNL to support the core missions of the Department of Energy as well as program development activities. Currently, I am leading an effort toward the develop of a Data Analytics Framework for Manufacturing for the DoE's Advanced Manufacturing Office (AMO).

- R&D staff member (ORNL)

May 2011 to present

- Post Doctoral Research Associate (ORAU)
- May 2009 to May 2011
- Post Master Research Associate (ORAU)
- October 2008 to May 2009 January 2007 to September 2008
- ASTRO program participant (ORAU)

- Visiting Scholar (UTK)

August 2004 to December 2006

## Applied Physics Laboratories, The University of Tennessee (UTK)

Knoxville, Tennessee, USA

August 2004 to January 2007

Research Assistant: software and harware development for biomedical applications;

#### Laboratoire Électronique Informatique Image, Université de Bourgogne Dijon, FRANCE March 2002 to August 2004

Technology Transfer Engineer: During two years, I was in charge of the program development and the technology transfer management for the Le2i research laboratory ( $\sim$ 60 permanent researchers at the time), and I was also involved in the software and hadware development of several of the over 15 proposals awarded.

BOOK CHAPTER

Shaun S. Gleason, Vincent C. Paquit, Deniz Aykac, "Image segmentation," in Quantitative Magnetic Resonance Imaging in Cancer: From Theory to Clinical Applications,

PATENTS

Roger A. Kisner, Timothy J. McIntyre, Vincent C. Paquit, "Apparatus and methods for imaging interior surfaces of a tube or the like," US10009526B2, 2018

JOURNAL Publications (Peer-reviewed)

Sean Yoder, Peeyush Nandwana, Vincent C. Paquit, Michael M. Kirka, Andrew Scopel, Ryan R. Dehoff, Sudarsanam S. Babu, "Approach to Qualification using E-PBF In-situ Processes Monitoring in Ti-6Al-4V", Journal of Materials Processing Technology, (under review)

Sujana Chandrasekar, Jamie B.Coble, Sean Yoder, Ryan R. Dehoff, Peeyush Nandwana, Vincent C. Paquit, Sudarsanam S. Babu, "Data-Driven Investigation of Recyclability of Metal Powders for Additive Manufacturing," ASTM Journal of Smart and Sustainable Manufacturing Systems, (under review)

Hicham Ghossein, Ahmed Arabi Hassen, Vincent C. Paquit, Lonnie J Love, Uday K Vaidya, "Innovative Method for Enhancing Carbon Fibers Dispersion in Wet-Laid Nonwovens," Materials Today Communications, Elsevier, 2018

Sean Yoder, S Morgan, C Kinzy, E Barnes, Michael M. Kirka, Vincent C. Paquit, Peeyush Nandwana, Alel Plotkowski, Ryan R. Dehoff, Sudarsanam S. Babu, "Characterization of topology optimized Ti-6Al-4V components using electron beam powder bed fusion," Additive Manufacturing, Elsevier, 2018

JOURNAL PUBLICATIONS (Peer-reviewed) Peeyush Nandwana, Michael M. Kirka, **Vincent C. Paquit**, Sean Yoder, Ryan R. Dehoff, "Correlations Between Powder Feedstock Quality, In Situ Porosity Detection, and Fatigue Behavior of Ti-6Al-4V Fabricated by Powder Bed Electron Beam Melting: A Step Towards Qualification," The Journal of The Minerals, Metals & Materials Society, 2018

Chad A. Steed, Ryan R. Dehoff, William H. Halsey, Sean L. Yoder, Vincent C. Paquit, Sarah S. Powers, "Falcon, Visual Analysis of Large, Irregularly Sampled, and Multivariate Time Series Data in Additive Manufacturing," Computers & Graphics, Elsevier, 2017

Klaus P. Ziock, Christopher B. Boehnen, Joey M. Ernst, Lorenzo Fabris, Jason P. Hayward, Thomas P. Karnowski, Vincent C. Paquit, Dilip R. Patlolla, David G. Trombino, "Motion Correction for Passive Radiation Imaging of Small Vessels in Ship-to-Ship Inspections," Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016

Georgia Tourassi, Sophie Voisin, Vincent C. Paquit, Elizabeth Krupinski, "Investigating the link between radiologists' gaze, diagnostic decision, and image content," Journal of the American Medical Informatics Association, 2013

Christopher J. Mann, Philip R. Bingham, Henry K. Lin, Vincent C. Paquit, Shaun S. Gleason, "Dual Modality Live Cell Imaging with Multiple-Wavelength Digital Holography and Epi-Fluorescence," 3D Research, Springer, 2011

Vincent C. Paquit, Jeffery R. Price, Kenneth W. Tobin, Fabrice Mériaudeau, "3D and Multispectral Imaging for Subcutaneous Veins Detection," Opt. Express 17, 2009

Christopher J. Mann, Philip R. Bingham, Vincent C. Paquit, Kenneth W. Tobin, "Quantitative Phase Imaging by Three-Wavelength Digital Holography," Opt. Express 16, 2008

CONFERENCE PUBLICATIONS AND PRESENTATIONS (Peer-reviewed) Sarah S. Powers, Ryan R. Dehoff, Vincent C. Paquit, Chad A. Steed, Derek E. Kistler, "Application of Data Analytics to Additive Manufacturing," 11th Workshop on Data Mining and Decision Analytics (DM-DA 2016), 2016

William H. Halsey, Chad A. Steed, Ryan R. Dehoff, Vincent C. Paquit, Sean L. Yoder, "Segmented Time Series Visualization Tool for Additive Manufacturing," IEEE Symposium on Large Data Analysis and Visualization, 2016

Chad A. Steed, Ryan R. Dehoff, William H. Halsey, Sean L. Yoder, Vincent C. Paquit, Sarah S. Powers, "Advancing Additive Manufacturing Through Visual Data Science," IEEE Visualization in Data Science, 2016

Dilip R. Patlolla, Harini Sridharan, Vincent C. Paquit, Jeanette E. Weaver, Mark A. Tuttle, Anil M. Cheriyadat, "Mapping and Characterizing Global-Scale Human Settlements Using HPC," Super Computing conference (SC'13), 2013

Vincent C. Paquit, Thomas P. Karnowski, Deniz Aykac, Yakin Li, Kenneth W. Tobin Jr., Edward Chaum, "Detecting flash artifacts in fundus imagery," IEEE Engineering in Medicine and Biology Society Conference (EMBC), 2012

Klaus P. Ziock, Christopher B. Boehnen, Joey M. Ernst, Lorenzo Fabris, Jason P. Hayward, Vincent C. Paquit, Dilip R. Patlolla, "Motion Correction for Passive Radiation Imaging of Small Vessels in Ship-to-Ship Inspections," IEEE Nuclear Science Symposium, 2012

CONFERENCE PUBLICATIONS AND PRESENTATIONS (Peer-reviewed) Vincent C. Paquit, Mark W. Wendel, David K. Felde, "Quantitative measurement by artificial vision of small bubbles in flowing mercury," SPIE Electronic Imaging - Image Processing: Machine Vision Applications IV, 2011

Christopher Boehnen, Vincent C. Paquit, Klaus Ziock, Tyler Guzzardo, Michael Whitaker, Ana Raffo-Caiado, "Field trial of a highly portable coded aperture gamma ray and 3D imaging system," Future of Instrumentation International Workshop (FIIW), 2011

Vincent C. Paquit, Shaun S. Gleason, Udaya C. Kalluri, "Monitoring plant growth using high resolution micro-CT images," SPIE Electronic Imaging - Image Processing: Machine Vision Applications IV, 2011

Shaun S. Gleason, Vincent C. Paquit, Hassina Z. Bilheux, Keely Willis, Alyssa Deleon, Whitney McNutt, Udaya C. Kalluri, "X-ray and Neutron Imaging for Plant Systems Biology Investigations," Future of Instrumentation International Workshop (FIIW), 2010.

Mark Wendel, Ashraf Abdou, **Vincent C. Paquit**, David Felde, Bernard Riemer, "Creating Small Gas Bubbles in Flowing Mercury Using Turbulence at an Orifice," ASME 3rd Joint US-European Fluids Engineering Summer Meeting. 2010.

Derek Rose, Itamar Arel, Thomas Karnowski, **Vincent C. Paquit**, "Applying Deep-Layered Clustering to Mammography Image Analytics," Biomedical Sciences and Engineering Conference (BSEC), 2010

Fabrice Mériaudeau, Vincent C. Paquit, Nicolas Walter, Jeffery R. Price, Kenneth W. Tobin, "3D and Multispectral Imaging for Subcutaneous Veins Detection," Proceedings of the IEEE International Conference on Image Processing (ICIP'09), 2009

Vincent C. Paquit, Fabrice Mériaudeau, Jeffery R. Price, Kenneth W. Tobin, "Multispectral Imaging For Subcutaneous Structures Classification And Analysis," International Topical Meeting on Optical Sensing and Artificial Vision (OSAV'08), 2008.

Vincent C. Paquit, Jeffery R. Price, Fabrice Mériaudeau, Kenneth W. Tobin, "Improving Light Propagation Monte Carlo Simulations with Accurate 3D Modeling of Skin Ttissue," Proceedings of the IEEE International Conference on Image Processing (ICIP'08), 2008.

Vincent C. Paquit, Jeffery R. Price, Fabrice Mériaudeau, Kenneth W. Tobin, "Simulation of Skin Reflectance Images Using 3D Tissue Modeling and Multispectral Monte Carlo Light Propagation," IEEE Engineering in Medicine and Biology Society Conference, (EMBC'08), 2008.

Vincent C. Paquit, Jeffery R. Price, Fabrice Mériaudeau, Kenneth W. Tobin, "3D Multispectral Light Propagation Model For Subcutaneous Veins Imaging," SPIE Medical Imaging 2008: Physics of Medical Imaging, 2008.

Jeffery R. Price, Timothy Gee, Vincent C. Paquit, Kenneth W. Tobin, "On the Efficacy of Correcting for Refractive Effects in Iris Recognition," IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR 2007), 2007

Vincent C. Paquit, Jeffery R. Price, Fabrice Mériaudeau, Kenneth W. Tobin, Thomas Ferrell, "Combining near-infrared illuminants to optimize venous imaging," SPIE Medical Imaging 2007: Visualization, Image-Guided Procedures, and Display, 2007

Conference Publications and Presentations Vincent C. Paquit, Jeffery R. Price, Ralph Seulin, Fabrice Mériaudeau, Rubye H. Farahi, Kenneth W. Tobin, Thomas Ferrell, "Near-infrared imaging and structured light ranging for automatic catheter insertion (Cum Laude Poster Award)," SPIE Medical Imaging, 2006

Alex Plotkowski, Ryan R. Dehoff, **Vincent C. Paquit**, Peeyush Nandwana, Michael Kirka, Yousub Lee, Chris Arthur, "In situ detection of porosity and its correlation with fatigue behavior of additive manufactured Ti-6Al-4V," ASPE and euspen Summer Topical Meeting, 2018

Peeyush Nandwana, Michael Kirka, Sean Yoder, Vincent C. Paquit, Ercan Cakmak, Ryan R. Dehoff, "Integrated Materials Theory, Modeling and Data Analytics for Metal Additive Manufacturing," TMS Annual Meeting and Exhibition, 2018

Ryan Dehoff, Michael Kirka, Jacob Raplee, Alex Plotlowski, **Vincent C. Paquit**, Sean Yoder, Peeyush Nadwana, "Status of In-situ Process Monitoring in the Electron Beam Melting Process," MS&T, 2017

Peeyush Nandwana, Michael Kirka, Vincent C. Paquit, Sean Yoder, Ercan Cakmak, Ryan R. Dehoff, "Fatigue Behavior and Defect Correlation in Material Fabricated in the Electron Beam Melting Process," ASTM Symposium on Fatigue and Fracture of Additive Manufactured Materials and Components, 2017

Sarah Powers, Ryan R. Dehoff, Vincent C. Paquit, Chad Steed, Derek Kistler, "Overcoming additive manufacturing challenges using data analytics," Grace Hopper Celebration of Women in Computing, 2017

Harini Sridharan, Anil M. Cheriyadat, Dilip R. Patlolla, **Vincent C. Paquit**, Jiangye Yuan, "High Performance Computing for Large Scale Settlement Mapping and Characterization using High Resolution Imagery," Association of American Geographers Annual Meeting (submitted), 2015

Ryan R. Dehoff, Frank Medina, Benjamin George, **Vincent C. Paquit**, "Real Time Defect Detection on New Generation Electron Beam Manufacturing System," Materials Science & Technology, 2014

Ralph B. Dinwiddie, Benjamin George, **Vincent C. Paquit**, Ryan R. Dehoff, Frederick A. List III, Larry E. Lowe, "Infrared Imaging of the E-Beam Melting 3D-Printing Process," SPIE Defense + Security Symposium, 2014

Dilip R. Patlolla, Harini Sridharan, Anil M. Cheriyadat, **Vincent C. Paquit**, "A Scalable Computational Framework for Large-Scale Critical Infrastructure Mapping Using Satellite Imagery," to appear Association of American Geographers, 2014

Harini Sridharan, Anil M. Cheriyadat, Dilip R. Patlolla, Jiangye Yuan, Jeanette E. Weaver, Vincent C. Paquit, Eddie A Bright, "MSMTool - A scalable remote sensing solution for locating population," to appear Association of American Geographers, 2014

Stu Ostro, Dan Huber, Joe H. Casola, Dale Kaiser, Thomas P. Karnowski, **Vincent C. Paquit**, Shih-Chieh Kao, Jennifer Francis, Jay Gulledge, "Characterizing Anomalous Mid-tropospheric Ridges and Their Trends," 26th Conference on Climate Variability and Change, 2014

CONFERENCE
PUBLICATIONS
AND
PRESENTATIONS

Dale Kaiser, Shih-Chieh Kao, Thomas P. Karnowski, **Vincent C. Paquit**, "Exploring 500 hPa Variations over 1979–2012: An Overview of Initial ORNL Efforts," ORNL Monster Ridges Workshop, 2013

Harini Sridharan, Anil M. Cheriyadat, Dilip R. Patlolla, Vincent C. Paquit, "A Computational Framework for Satellite Image Driven Mapping and Monitoring of Critical Infrastructure," ORNL Eugene P. Wigner Distinguished Lecture Series on Science, 2013

Michael Kirka, Ryan Dehoff, **Vincent C. Paquit**, Michael Goin, Michael Pearce, Sudarsanam Suresh Babu, Curtis Frederick, "Rationalization of Advanced Site-specific Microstructure Control within Additive Manufactured Components," TMS Annual Meeting & Exhibition, 2016

Ryan Dehoff, Vincent C. Paquit, Michael Kirka, Edwin Schwalbach, Michael Groeber, Michael Goin, Michael Pearce, "Automated in-situ defect detection and geometry validation on the Q10 system," TMS Annual Meeting & Exhibition, 2016

Udaya Kalluri, Hassina Bilheux, Shaun Gleason, Vincent C. Paquit, Timothy McKnight, Justin Baba, Bob Standaert, Saed Mirzadeh, Sandra Davern, "X-ray-, Neutron-and Radio-imaging for Plant Systems Biology," Plant and Animal Genome XXI, 2013

Vincent C. Paquit, Jeffery R. Price, Fabrice Mériaudeau, Kenneth W. Tobin Jr, "Quantitative imaging of subcutaneous veins with multispectral illumination and 3D modeling," Biomedical Science and Engineering Center (BSEC) conference, 2013

Dustin Osborne, Deniz Aykac, Shaun S. Gleason, Ryan A. Kerekes, John S. Wall, Jens Gregor, Vincent C. Paquit, "Whole Body Murine Organ Segmentation Using microCT and Advanced 3D Level Set Algorithms," World Molecular Imaging Congress, 2012

Vincent C Paquit, Philip Bingham, Shaun S. Gleason, Ana Claudia Raffo-Caiado, Anil M. Cheriyadat, Ranga Raju Vatsavai, "Geospatial Imaging Toolbox for International Safeguards Applications," Meeting Institute of Nuclear Materials Management (INMM), 2012

Georgia D. Tourassi, **Vincent C Paquit**, "Towards Human-Centered Decision Support in Mammography," Meeting Biomedical Engineering Society (BMES), 2012 (invited talk)

Georgia D. Tourassi, Vincent C Paquit, E Krupinski, "Machine Learning Analysis of Radiologists' Eye-Gaze Data, Decisions, and Local Image Texture to Reduce Diagnositic Errors in Screening Mammography," 2012

Vincent C Paquit, "Non-Invasive Optical Imaging of Cutaneous and Sub-Cutaneous Structures", invited Biomedical Science and Engineering Center (BSEC) seminar, 2012

Carlos Rojas, Vincent C Paquit, Oscar H. Grandas, Robert Patton, Barbara G. Beckerman, "Text and Image Analysis for Endovascular Abdominal Aortic Aneurysms Repair Data," Biomedical Science and Engineering Center (BSEC) conference, 2011

Vincent C Paquit, Oscar H. Grandas, Shaun S. Gleason, Barbara G. Beckerman, "Post-operative monitoring of abdominal aortic aneurism using quantitative imaging," Biomedical Science and Engineering Center (BSEC) conference, 2011

# Vincent C. Paquit

CONFERENCE
PUBLICATIONS
AND
PRESENTATIONS

Vincent C. Paquit, Jeffery R. Price, Fabrice Mériaudeau, Kenneth W. Tobin Jr, "Quantitative imaging of subcutaneous veins with multispectral illumination and 3D modeling," Biomedical Science and Engineering Center (BSEC) conference, 2011

Barbara Beckerman, Chris Symons, Ryan Kerekes, **Vincent C. Paquit**, Robert Patton, Shaun Gleason, "A Multi-Modal, Semi-Supervised Learning System for Building Better Decision Support Systems for the Analysis of Mammograms," Annual Meeting of the Radiological Society of North America (RSNA), 2009

Chris Symons, Ryan Kerekes, **Vincent C. Paquit**, Robert Patton, Shaun Gleason, Barbara Beckerman, "A multimodal, semi-supervised learning system for building better decision support systems for the analysis of mammograms," Annual Meeting of the Radiological Society of North America (RSNA), 2009.

Thomas L Ferrell, François G Pin, Lonnie J Love, John F Jansen, Kenneth W Tobin, Rubye Farahi, Jeffery R Price, **Vincent C. Paquit**, David Hedden, Fabrice Mériaudeau, Ralph Seulin, "Intelli-cath: Toward automated needle-insertion systems and intelligent catheters," Annual Medicine Meets Virtual Reality (MMVR) Conference, 2006.

Invention Disclosures Chad A. Steed, Thomas E. Potok, Robert M Patton, Ryan R. Dehoff, **Vincent C. Paquit**, "A Visual Analytics Framework for Exploratory Data Analysis of Time-based, Multivariate Log Data," UT-Battelle, LLC, Invention Disclosure No. 201603628, January 29, 2016

Roger A. Kisner, Timothy J. McIntyre, **Vincent C. Paquit**, "Internal tube inspection system," UT-Battelle, LLC, Invention Disclosure No. 3179.0, 2013 (patent pending)

Kenneth W. Tobin, Jeffery R. Price, Vincent Paquit, "Improved Device for Assisted Venipuncture," UT-Battelle, LLC, Invention Disclosure No. 1300002067, March 31, 2008

Thomas Ferrell, David Hedden, Rubye H. Farahi, **Vincent Paquit**, Fabrice Mériaudeau, "Self-contained Compact Venous Imager for Catheter Insertion," University of Tennessee - Knoxville, USA, 22 December 2005

RESEARCH SUPPORT Data analytics for additive manufacturing: I am the team lead in charge of developing a data analytics framework for manufacturing, using data from the Manufacturing Demonstration Facility (MDF) and the Carbon Fiber Technology Facility (CFTF). This effort is mainly supported by DOE funding with additional funding from collaboratino with industry and other government agencies. Since FY16 my research budget is between \$2M and \$2.5M each year.

\*\*Role: PI and co-PI

Vincent C. Paquit et al., "Multimodal Imaging of Belowground Plant Root Distribution and Dynamics," Oak Ridge National Laboratory - LDRD Seed Money, 2016

Role: PI - Award: \$190,000

Vincent C. Paquit et al., "Systems for steganalysis," Oak Ridge National Laboratory - LDRD Seed Money, 2015

Role: PI - Award: \$190,000

Jeffery R. Price, **Vincent C. Paquit**, "Quantitative imaging of subcutaneous veins with multispectral Illumination and 3D modeling," Oak Ridge National Laboratory - LDRD Seed Money, 2008

\*\*Role: Co-PI - Award: \$175,000

# Vincent C. Paquit

#### Honors and Awards

Elected Senior Member of the Institute of Electrical and Electronics Engineers (IEEE) in May 2015

ORNL CSED - Technical Accomplishement award: for the development of novel image processing algorithms on GPU platform integrant part of the "Accelerated Settlement Detection using High Performance Computing Methods" (2015)

Author of paper (Paquit et al 2006) selected as "Best Poster" of session and "Cum Laude" poster for Visualization, Image-Guided Procedures, and Display session at the SPIE Symposium on Medical Imaging, February 2006.

## Professional Activities

Journal - guest editor:

• Hindawi Publishing Corporation: International Journal of Biomedical Imaging

Conference - committee member:

- SPIE Electronic Imaging conference: Image Processing Machine Vision Applications (2012 2019)
- ORNL Biomedical Science and Engineering Center (BSEC) conference (2013, 2014)
- Quality Control by Artificial Vision (QCAV) conference (2015, 2019)

Act as reviewer for the following journals

- SPIE publishing, Journal of Biomedical Optics
- SPIE publishing, Journal of Electronic Imaging
- Optical Society of America: Optics Letters
- Optical Society of America: Optics Express
- Optical Society of America: Applied Optics
- Optical Society of America: JOSA A
- Institute of Physics: Physica Scripta
- Springer, 3D Research Journal
- Springer, Precision Agriculture

Acted as reviewer for the following conferences

- IEEE, Engineering in Medicine and Biology Society Conference
- IEEE, Biomedical Science and Engineering Center conference
- IEEE, Future of Instrumentation International Workshop
- SPIE, Electronic Imaging conference: Image Processing Machine Vision Applications
- ORNL, DOE Publication Tracking System