BRYSON R. PAYNE, PH.D., CISSP®
CURRICULUM VITAE

EDUCATION

Doctor of Philosophy, Computer Science – Georgia State University, 2004.
> Dissertation: *Accelerating Scientific Computation in Bioinformatics by Using Graphics Processing Units as Parallel Vector Processors.* Graduate research assistant in Hypermedia Visualization Lab.

Master of Education, Mathematics – North Georgia College & State University, 1999.
> Graduate teaching assistantship in Department of Mathematics and Computer Science.

Bachelor of Science, Mathematics, magna cum laude – North Georgia College & State University, 1997.

Associate of Arts, with highest honors – Young Harris College, 1991.
> International exchange program participant in Toulouse, France, Editor of *Enotah Echoes* newspaper.

TEACHING EXPERIENCE

University of North Georgia *(formerly North Georgia College & State University)*
Professor   **August 2015-present**
Tenured Full Professor of Computer Science & Information Systems. Graduate faculty member in the Mike Cottrell College of Business MBA program.
- Exceptional student ratings in Information Management, Web Programming, Mobile App Development, Computer Graphics, Java I & II, Artificial Intelligence.
- Course designer and sole instructor of MGMT 6610, Information Management; only MBA faculty member to teach all six MBA graduating cohorts 2010-2015.
- Incorporated novel technologies into new and existing courses, including 3D printers in Computer Graphics, Vex robotics and various quadcopter drones in Intelligent Systems and Artificial Intelligence.

Associate Professor, Tenured   **August 2010-July 2015**
Tenured Associate Professor of Computer Science & Information Systems. Graduate faculty member in the Mike Cottrell College of Business MBA program.
- Developed courses and new minor in Mobile App Programming, 2013, using Android and iOS platforms. Redesigned CSCI 4950 Senior Project to incorporate ACM publication format and timeline.
- Updated CSCI 3000 Web Programming course to use new languages (PHP, MySQL) and technologies (AJAX and Google, Twitter, Facebook APIs, App Engine and Amazon Web Services).

Assistant Professor   **August 2005-July 2010**
Assistant Professor of Computer Science in the School of Science & Health Professions, graduate faculty member in the Mike Cottrell School of Business MBA program.
- Developed and taught university's first Web 2.0 Programming and Artificial Intelligence courses.
- Coordinated computer science course scheduling for six faculty and developed multi-year course rotation plan for computer science & information systems degree programs.
- Coached multiple programming teams, faculty co-sponsor for the Computer Animation Group.

Georgia College & State University
Instructor, Assistant Professor   **August 2003-August 2005**
Instructor, Assistant Professor of Information Systems, J. Whitney Bunting School of Business.
- Taught Java programming, Web programming, networking and e-commerce courses at the undergraduate and graduate levels with exceptional student ratings on course evaluations.

- Developed a PHP-programming-based graduate course, MMIS 6293 E-Commerce Development.
- Supervised graduate student assistants. Performed departmental server administration for four servers.
- Built and maintained classroom and research lab configuration and imaging.

University of North Georgia *(formerly North Georgia College & State University)*
Adjunct/Instructor   **June 1998-July 2003**
Adjunct faculty for one year, then full-time Instructor for four years while completing Ph.D. in C.S.

<u>LEADERSHIP EXPERIENCE</u>
University of North Georgia *(formerly North Georgia College & State University)*
Department Head, Computer Science   **January 2013 – July 2014**
Inaugural department head of the new Department of Computer Science & Information Systems. Orchestrated the development of two thriving, accredited CS and IS degree programs with over 500 majors on two campuses.
Selected achievements:
- Tripled the number of graduating seniors per year in just two years as an independent department.
- Removed barriers to student success by simplifying prerequisites for all upper-level computer science courses, improving section offerings, and sensibly scheduling major and core courses.
- Led the departmental effort to update the curriculum to match ABET & ACM standards for upcoming ABET accreditation application, and added relevant, current-interest courses.
- Developed three new, high-value minors (Cyber Security, Mobile App Development, Information Assurance & Security) for Fall 2014.
- Began building relationships with alumni from IBM, CareerBuilder, Blizzard, Riot Games, Equifax, and more, hosting IT Industry guest lectures from UNG alumni and industry leaders.
- Featured in campus, local, and broadcast news over 40 times in the past five years, with 15 articles featuring the new computer science department in just 18 months as department head (see http://brysonpayne.com/in-the-news/ for a listing of news articles and broadcast coverage).

North Georgia College & State University
Chief Information Officer   **November 2006-August 2012**
Led university technology transformation in the merger of IT at two institutions with a combined 15,000 students, 2,000 faculty and staff, on four campuses. Managed annual budgets in excess of $4 Million.
Selected achievements:
- Successfully implemented a leading-edge, scientific approach to organizational structure to transform all North Georgia IT units into a cohesive, customer-oriented organization.
- Delivered on-time and within-budget technology solutions for over $260 million in construction and renovations over six years.
- 2010-2011 Chair of the University System of Georgia's CIO Advisory Council, member of the USG Audit Advisory Committee that established the USG IT Audit Handbook.
- Established the university's first I.T. Advisory Board, connecting university leadership with regional industry IT executives & the first leadership training program for IT managers and staff.

Quality Enhancement Plan Co-Director   **Spring - Fall 2006**
Co-Director of the university's SACS accreditation Quality Enhancement Plan in Information Literacy.
- Secured five-year reaffirmation from our regional accrediting body.
- Coordinated efforts across 16 academic departments to infuse critical thinking and evaluation of information sources into core curriculum and upper-level major courses.

Director, Intellectual Capital Partnership Program (ICAPP)   **Spring 2000-Summer 2003**
Originator and director of an $850,000 state grant-funded, cohort-based IT training program.
- Developed innovative, accelerated curricula for two 24-semester-hour concentrations.
- Recruited students and faculty for a highly specialized IT educational program.
- Collaborated with Admissions, Registrar's Office, Financial Aid, and Business Office to implement a student-friendly, intensive, cohort-based program.

GRANTS AND FUNDING
- Received $5,000 Presidential Innovation Award (Co-PI w/R. Byers, E. Van Sickle, History), "Building New Ways to Display, Embed, and Learn Content: The UNG eBook Widget Project", November 2014.
- Awarded $2,000 Leaders in Instructional Technology Program (LITP) funding for Computer Graphics hardware and software for revised CSCI 3600 curriculum, June 2014.
- Received $10,000 from the Georgia Technology Authority (GTA) to support technology internships for the UNG TAG-Ed Summer Internship program. December 2013.
- Awarded $3,000 from the Center for Undergraduate Research and Creative Activities (CURCA), "Using Thoughts to Control Machines: An EEG Interface to Control Computers". Co-PI with Dr. Chuck Robertson, Psychological Science Department. December 2013.
- Secured $41.8 million as a co-writer of the North Georgia Network (NGN) Project's $33.5 million federal grant and $2.5 million state support for the first regional 3.6 Terabit fiber optic network through 12 rural north Georgia counties. Awarded December 2009.
- Received state funding for $1 million Capital Improvement Plan project to upgrade all 120 classrooms on main campus with state-of-the-art technology, including distance learning and lecture capture systems for two schools across four sites. Completed August 2011.
- Won $1.3 million in Regents' capital funding support for IT infrastructure upgrades, including 80Gb network backbone on the main campus, VoIP, and ubiquitous wireless, 2010.
- Achieved $240,000 in grant funding as a co-writer of the OneGeorgia Authority BRIDGE grant for the feasibility study and design of the North Georgia Network (NGN) project, awarded December 1, 2008.
- Realized 16,000 Euro ($21,600 US) Spanish research grant for V-ATRAP: Videovigilancia Asistida en Tiempo Real mediante hardware de Altas Prestaciones (Assisted Video Surveillance in Real Time on High Precision Hardware), in collaboration with Universidad Rey Juan Carlos, Madrid. January 2008.
- Awarded 8,000 Euros ($11,000 US) toward a five-week computer science research fellowship in Madrid, Spain, for travel, lodging, and departmental expenses at Universidad Rey Juan Carlos, Madrid, May-June 2007. Gave guest lectures at two conference workshops and three universities in English and Spanish.
- Won $850,000 in Intellectual Capital Partnership Program (ICAPP) grant funding to support an intensive, cohort-based IT educational program in both Web Programming and Network Administration, funded 2000-2001 and 2001-2002.

PUBLICATIONS
Books/Monographs
Payne, B. R. (2015). *Teach Your Kids to Code*. San Francisco, CA: No Starch Press. 336 pages. (In press, publication date: April 25, 2015). ISBN No. 978-1593276140.
Payne, B. R. (2005). Accelerating Scientific Computation in Bioinformatics by Using Graphics Processing Units as Parallel Vector Processors. (Doctoral dissertation, Georgia State University, 2005). *Dissertation Abstracts International* (UMI No. AAT 3170179, ISBN No. 0542060167).

Peer-Reviewed Journal Publications

Payne, B. Using 3D printers in a computer graphics survey course. Submitted to *Journal of Computing Science in Colleges (JCSC),* April 2015.

Payne, B., Walker, A. (2015). Motivating secure coding practices in a freshman-level programming course. *Information Security Education Journal, 1*(2), 99-108. (ISSN: 2349-8161)

Shen, J., Yang, J., Taha-abusneineh, S., Payne, B., Hitz, M. (2014). Structure-Preserving Imagery Reconstruction. *Journal of Cyber Security and Mobility, 3*(3), 263-288. (ISSN: 2245-1439)

Payne, B. (2014). Teaching Android and iOS native mobile app development in a single semester course. *Journal of Computing Science in Colleges (JCSC), 30* (2), 176-183. (ISSN: 1937-4771)

Yang, J., Payne, B., Hitz, M., Zhang, Y., Guo, P. Li, L. (2014). Fair Gain Based Dynamic Channel Allocation for Cognitive Radios in Wireless Mesh Networks. *Journal of Computers, 9* (10), 2335-2341. (ISSN 1796-203X)

Cabido, R., Montemayor, A.S., Pantrigo, J.J., Bartinez-Zarzuela, M., & Payne, B.R. (2012). High-performance template tracking. *Journal of Visual Communication & Image Representation, 23*(1), 271-286, Elsevier, January 2012 (ISSN No. 1047-3203).

Holland, R. G., Smith, A., Hasselback, J. R., Payne, B. (2010). Survey responses: mail versus email solicitations. *Journal of Business & Economics, 8*(4), 95-98, Clute, April 2010 (ISSN No. 1542-4448).

Cabido, R., Montemayor, A. S., Pantrigo, J. J., & Payne, B. R. (2009). Multiscale and local search methods for real time region tracking with particle filters: local search driven by adaptive scale estimation on GPUs , *Machine Vision and Applications 21*(1): 43-58, Springer, November 2009 (ISSN No. 0932-8092).

Presentations with Published Proceedings

Y. Wang, J. Yang, J. Shen, B. Payne, J. Guo, K. Hua. Compression of Video Tracking and Bandwidth Balancing Routing in Wireless Multimedia Sensor Networks. *8th International Conference on Mobile Multimedia Communications (MOBIMEDIA 2015),* Chengdu, China, May 25-27, 2015.

B. R. Payne, C.A. Dluhy. Big Data on GPU: A low-cost approach to searching large, unstructured data using commodity graphics processors (abstract). *Proceedings of the 2015 International Academy of Business Disciplines annual conference*, Orlando, March 26-28, 2015, p. 5.

J. Yang, B. Payne, M. Hitz, Z. Fei, L. Li, T. Wei, Location aided energy balancing strategy in green cellular networks. *Workshop on Wireless Mesh and Ad-hoc Networks at ICCCN 2014*, Shanghai, China, August 7, 2014.

M. A. Hitz, B. R. Payne, Enhancing engagement in introductory computing classes via interactive, online coding (abstract). *Proceedings of the 26th annual International Academy of Business Disciplines conference*, San Diego, April 10-12, 2014, p. 28.

B. R. Payne, J. F. Lay, M. A. Hitz, Automatic 3D Object Reconstruction from a Single Image. *Proceedings of the 52nd Annual ACM Southeast Conference*, March 28-29, 2014.

R. Cabido, A. S. Montemayor, J. J. Pantrigo, M. Martínez, and B. R. Payne. 2009. Face tracking using skin detection and parallel kernel based methods. In *ACM SIGGRAPH ASIA 2009 Posters (SIGGRAPH ASIA '09).* ACM, New York, NY, USA, p.52.

M. A. Hitz, B. R. Payne. A Lagrangian Multipliers Approach to Compute Nearest Singular Hankel Matrices. ECCAD 2007 Poster Abstracts, *ACM Commun. Comput. Algebra* 41, 1-2 (March 2007), p.13.

B. R. Payne, "Digital Image Processing on GPUs", Proceedings of *Seminarios sobre Sistemas Inteligentes* (SSI'06), Universidad Rey Juan Carlos, Madrid, Spain, 2006 (ISBN No. 978-84-9849-020-6).

B. R. Payne, G. S. Owen, I. T. Weber, "Accelerating Protein Structure Recovery Using Graphics Processing Units" in Proceedings of International Conference on Computational Science (ICCS 2005)**,** *Lecture Notes in Computer Science*, volume 3514, Springer-Verlag, 2005, p.451-459 (ISBN No. 3-540-26032-3).

B. R. Payne, S. O. Belkasim, G. S. Owen, M. C. Weeks, and Y. Zhu, "Accelerated 2D & 3D Image Processing on GPUs," in Proceedings of the International Workshop on Computer Graphics and Geometric Modeling (CGGM'05), *Lecture Notes in Computer Science*, volume 3515, Springer-Verlag, 2005, p.256-264 (ISBN No. 3-540-26043-9).

B. R. Payne, G. S. Owen, I. Weber, Y. Zhu, and P. Liu. 2004. A portable, reusable framework for scientific computing on GPUs. In *ACM SIGGRAPH 2004 Posters (SIGGRAPH '04)*, Ronen Barzel (Ed.). ACM, New York, NY, USA, p.93.

Non-Peer-Reviewed Publications (IT Trade Publication)
B. R. Payne (2012). Preempting the next CIO. *CIO Magazine,* Sept 1, 2012, p. 14. IDG Enterprises.

Conference Presentations
J. Lay, B. Payne, M. Hitz. Automatic 2D to 3D Object Reconstruction using Neural Networks. Research poster presented at University of North Georgia 19th Annual Research Conference, April 2, 2014.

G. Santos, B. R. Payne. Implementing Big Data Algorithms on GPUs. Research poster presented at University of North Georgia 19th Annual Research Conference, April 2, 2014.

R. Jackson, B. R. Payne, M. Roberson, M.P. Hamilton, D. Howerin. Georgia Workforce Development in the Digital Age. Panel session at North Georgia Digital Economy Conference, December 12, 2013.

D. Roode, B. R. Payne. Challenges and Choices across Two Categories of IT Consolidations. Presentation at EDUCAUSE 2013, October 17, 2013.

B. R. Payne. Notes to the Next CIO. Leadership Track Presentation at 2012 USG Annual Computing Conference, Rock Eagle, GA, October 25-27, 2012.

B. R. Payne. Managing Projects and Motivating People. Presentation at 2011 USG Annual Computing Conference, Rock Eagle, GA, October 26-28, 2011.

B. R. Payne. Right-Sizing Project Management for a Mid-Sized University, Educomm 2011 CIO Summit presentation, Orlando, June 13-15, 2011.

B. R. Payne, J. Amman. Building Great IT: Restructuring IT for Better Transparency, Responsiveness and Efficiency. Presentation at 2010 USG Annual Computing Conference, Rock Eagle, GA, October 20-22, 2010.

B. R. Payne. Campus Email in the Cloud: Making the move to Google Apps, Microsoft Live, and Beyond. Moderator and presenter for panel presentation at 2010 USG Annual Computing Conference, Rock Eagle, GA, October 20-22, 2010.

B. R. Payne. University IT Governance: Improving Service without Breaking the Bank. Poster presented at Campus Technology 2010, Boston, July 17-19, 2010.

B. R. Payne. Re-Imagining University IT: Transparent, Responsive and Efficient. Poster presented at Campus Technology 2010, Boston, July 17-19, 2010.

R. Cabido, A. S. Montemayor, J. J. Pantrigo, B. R. Payne. Aceleración de procedimientos de mejora local en hardware gráfico para seguimiento visual. MAEB 2009, Sesión de Aplicación de las Metaheurísticas, Algoritmos Evolutivos y Bioinspirados en Visión Artificial e Informática Gráfica, Málaga, Spain, February 11-13, 2009.

B. R. Payne. A Bridge to Better Funding: Developing an IT Advisory Board. Presentation at University System Annual Computing Conference, Rock Eagle, GA, October 22-24, 2008.

R. Cabido, A. S. Montemayor, J. J. Pantrigo, B. R. Payne. High Performance Template Tracking using Fixed Models, research poster, SIGGRAPH 2008, Los Angeles, August 11-15, 2008.

R. J. Brown, M. A. Hitz, B. R. Payne. DFT-Based ab initio heuristics for identifying coding regions. Undergraduate research poster presented at ISBRA 2008, Atlanta, May 7, 2008.

R. Cabido, A. S. Montemayor, J. J. Pantrigo, B. R. Payne. Multiresolution and Local Search Methods for Optimizing Visual Tracking Processes on GPU, research poster, ACM SIGGRAPH 2007, San Diego, August 4-9, 2007.

R. Cabido, A. S. Montemayor, J. J. Pantrigo, B. R. Payne. Scalable Particle Filter Framework for Visual Tracking. Supercomputing 2006 Workshop on General-Purpose GPU Computing, Tampa, FL, November 13, 2006.

A. S. Montemayor, J. J. Pantrigo, R. Cabido, B. R. Payne, Á. Sánchez, F. Fernández. Improving GPU Particle Filter with Shader Model 3.0 for Visual Tracking, research poster, ACM SIGGRAPH2006, Boston, July 30 – August 3, 2006.

B. R. Payne, M. A. Hitz. Implementation of residue number systems on GPUs, research poster, ACM SIGGRAPH2006, Boston, July 30 – August 3, 2006.

A. S. Montemayor, R. Cabido, J. J.Pantrigo, B. R. Payne. Bandwidth-Improved GPU Particle Filter for Visual Tracking. 3rd Ibero-American Symposium on Computer Graphics, SIACG 2006, Santiago de Compostela, Spain. July 5-7, 2006.

M. A. Hitz and B. R. Payne. Fine-Grain Parallel Computing on Graphics Processors, ECCAD 2006, Philadelphia, PA. May 6, 2006.

M. A. Hitz and B. R. Payne. Implementing an XML-Based Device-Independent Scalable Graphical User Interface, 2005 Mid-Southeast ACM Chapter Fall Conference, Gatlinburg, TN. November 10-11, 2005.

B. R. Payne. Motivating Geometric Vision in Elementary Math with 3D Animation, Georgia Educational Technology Conference (GaETC) 2005. College Park, GA. November 9-11, 2005.

K. C. Heriot, B. R. Payne. Teaching Georgia Studies: Enhancing Classroom Participation with Technology, Georgia Council for the Social Studies State Conference, October 20-21, 2005.

B. R. Payne. Using 3D Modeling and Animation to Motivate Geometric Visualization in Elementary Math Students. 2005 Georgia Mathematics Conference, Rock Eagle, GA. October 19-22, 2005.

G. S. Owen, Y. Zhu, J. A. Chastine, and B. R. Payne. Teaching Programmable Shaders: Lightweight versus Heavyweight Approach, in ACM SIGGRAPH Conference Educators Program. Los Angeles, CA: ACM, 2005.

B. R. Payne, A project-based Web programming course approach for information systems majors. In *Proceedings of the 33rd Annual Conference of the International Business School Computing Association* (Savannah, GA, USA, July 24-27, 2005). IBSCA 2005.

B. R. Payne, G. S. Owen, I. Weber, Y. Zhu and P. Liu. Accelerating Automated Structure Fitting in Protein Crystallography by Using Programmable Graphics Processors, research poster presented at The 2nd Georgia State Biotech Symposium, Atlanta, May 24-25, 2004.

Selected Other Presentations

"3D Printing at UNG", invited presentation at Dahlonega Rotary Club, October 7, 2014.

"The State of Cyber Security in Higher Education", moderator for panel session at INTERFACE 2014 information security conference, Atlanta, GA, April 2, 2014.

"It's Their Future: Students talk about technology, jobs, and learning", moderator for panel session at North Georgia Digital Economy Conference, December 12, 2013.

"Leading from Wherever You Are", invited speaker at USG Staff Council Leadership Conference, October 2, 2013.

"Making Ethical Decisions", BB&T Center for Ethical Business Leadership/Junior Achievement Business Ethics Program, September 24-26, 2013.

"What Fiber Means to North Georgia", invited speaker at Leadership Georgia, September 13, 2013.

"Computer Science at UNG: The right place at the right time", invited presentation at Rotary Club of Lanier Forsyth, March 12, 2013.

"North Georgia Network", invited presentation at Leadership Lumpkin 2012 Education Day, Dahlonega, GA, November 8, 2012.

"Leading from the Heart: 15 Character Traits of a 21st Century Leader", invited speaker at North Georgia Student Leadership Presidents' Breakfast 2012, February 21, 2012.

"Great Decisions Lecture Series: Cybersecurity in 2012"– featured speaker at Great Decisions 2012, Gainesville, GA, January 30, 2012 and Cumming, GA, February 2, 2012, http://www.northgeorgia.edu/greatdecisions/

"I.T. at North Georgia: Innovation and NGN Update for Leadership Lumpkin", invited presentation at Leadership Lumpkin 2011, Dahlonega, GA, November 10, 2011.

"North Georgia Network Fiber Update", invited presentation at Dawson County Chamber of Commerce, Dawsonville, GA, July 14, 2011.

"Fiber for North Georgia", guest speaker at Dahlonega Sunrise Rotary Club, Dahlonega, GA, June 9, 2011.

CIO Executive Forum panelist, Association of IT Professionals Annual CIO Executive Forum, Atlanta, September 17, 2009. Represented Higher Education CIOs on a panel of CIOs from six different industries.

TechLinks Leader Roundtable panelist, TechLinks Q2 Leader Roundtable & Reception, Atlanta, April 23, 2009.

CIO Executive Council Southeast Regional Membership Meeting, Emory Healthcare, Atlanta, April 2,2009.

Hosted Regents' ACIT meeting at NGCSU, Summer 2008, and participated in panel on Outsourced Email Hosting with Google.

DISSERTATIONS/THESES ADVISED

Raúl Cabido Valladolid – Universidad Rey Juan Carlos, Madrid, Spain; *Optimización de filtros de partículas para seguimiento visual en arquitecturas gráficas de procesamiento vectorial (Optimization of particle filters for visual segmentation on vector processing graphics architectures)* – Defended March 2010.

Carlos Javier Ogáyar Anguita – Universidad de Granada, Granada, Spain; *Optimización de Algoritmos Geométricos Mediante el Uso de Recubrimientos Simpliciales (Optimization of Geometric Algorithms by Means of Simplicial Recoveries)* – Defended June 2006.

Antonio Sanz Montemayor – Universidad Rey Juan Carlos, Madrid, Spain; *Optimización de Algoritmos de Procesamiento de Vídeo para su Implementación sobre Tarjetas Gráficas de Consumo (Optimization of Video Processing Algorithms for Implementation on Commodity Graphics Cards)* – Defended March 2006.

Undergraduate research supervised

Jeanette Freeman, Andrew Carter, Cayce Koehler. "Mind-Controlled Drones", research poster, University of North Georgia 19th Annual Research Conference. Dahlonega, GA, April 2, 2014. Faculty mentors: Chuck Robertson, Bryson Payne.

ACADEMIC AND PROFESSIONAL ACTIVITIES

Papers Reviewer, InfoSecCD 2014, Information Security Curriculum Development Conference, Kennesaw, GA October 2014.

Program Chair, INTERFACE 2014, IT security conference, Atlanta, GA, February 2014.

Program Advisory Board Member, INTERFACE 2013, IT security conference, Atlanta, GA, August 2013.

Program Advisory Board Member, INTERFACE 2012, IT security conference, Atlanta, GA, October 2012.

Program Advisory Board Member, INTERFACE 2011, IT security conference, Atlanta, GA, October 2011.

Textbook Reviewer, Starting out with Java, fourth edition, authored by Walter Savitch, Addison-Wesley/Pearson, 2010.

Program Planning Committee Member, USG Computing Conference, Rock Eagle, GA, October 2010.

Article Reviewer, MM-2010-07-0044, "Image processing applications based on CUDA platforms", *IEEE MultiMedia,* September 2010.

Papers Reviewer, CGGM 2007-2009, Computer Graphics & Geometric Modeling workshop of the International Conference on Computational Science.

Textbook Reviewer, Absolute Java, third edition, authored by Walter Savitch, Addison-Wesley, 2008.

Papers Reviewer, 2007 International Conference on Computational Science and Applications, Kuala Lumpur, Malaysia, August 26-29, 2007.

Article Reviewer, TPDS-0231-0806: "Streaming Algorithms for Biological Sequence Alignment on GPUs", *IEEE Transactions on Parallel and Distributed Systems*, January 2007.

Textbook Reviewer, Web Application Design and Implementation: Apache 2, PHP5, MySQL, JavaScript, and Linux/UNIX, by Steven A. Gabarro, John Wiley & Sons, 2007.

SIGGRAPH 2006 Posters Reviewer, Boston, MA, July 30-August 3, 2006.

CGGM 2006 Program Committee Member and Papers Reviewer, Computer Graphics & Geometric Modeling workshop of the International Conference on Computational Science 2006, Reading, UK, May 28-31, 2006.

Textbook Reviewer, Absolute Java, second edition, authored by Walter Savitch, Addison-Wesley, 2006.

Textbook Reviewer, Starting Out with Java, authored by Tony Gaddis, Scott/Jones Inc., El Granada, CA, 2004.

PROFESSIONAL DEVELOPMENT

Leadercast, May 8, 2015, Atlanta, GA.

TEDxAtlanta, April 28, 2015, Atlanta, GA.

Georgia Regents University Cyber Education Summit, October 23, 2014, Augusta, GA.

TEDxAtlanta, May 6, 2014, Atlanta, GA.

Leadercast, May 9, 2014, Atlanta, GA.

NSA/DHS Centers of Academic Excellence Community Meeting, Cyber Security Center - NIST, September 16, 2013, Gaithersburg, MD.

CISSP Certification Training Bootcamp, online instruction, 20 hours, InfoSec Institute, May-June 2013.

Chick-fil-A Leadercast, May 10, 2013, Atlanta, GA.

TEDxAtlanta, May 7, 2013, Atlanta, GA.

Computational Investing, Statement of Accomplishment with Distinction, 10-week course through Coursera.org via GaTech Prof. Tucker Balch, January 2, 2013.

Chick-fil-A Leadercast, May 4, 2012, Atlanta, GA.

Gamification, 6-week course through Coursera.org via UPenn Prof. Kevin Werbach, Auguts 12, 2012.

The Oz Principle Accountability Training Public Workshop, September 13, 2011, Atlanta, GA.

Chick-fil-A Leadercast, May 6, 2011, Atlanta, GA.

Apple Executive Briefing: North Georgia Leadership Team, Cupertino, CA, March 23-25, 2011.

Mobile App Development Workshop, Kennesaw State University, April 24-25, 2010.

USG Executive Leadership Institute, October 2009-April 2010. Appointed by President Potter as one of two NGCSU scholars to attend the Chancellor's seven-month leadership program.

CampusTechnology 2008, 2009 & 2010 Executive Summit Program, Boston, MA.

Google Apps for Education Workshop, Atlanta, GA, October 16, 2008.

Six Sigma Green Belt certification course, Southern Polytechnic State University Continuing Education Center, February 6-8, 2008.

PMI Project Management Professional Certification Boot Camp, New Horizons, Atlanta, GA, December 17-21, 2007.

Apple Education USG Executive Briefing, Cupertino, CA, November 28-30, 2007.

Board of Regents ACIT New CIO Orientation, Atlanta, GA, December 15-16, 2006.

Apple Digital Campus Leadership Institute, Milledgeville, GA, November 1-3, 2005.

Child Internet Safety Training Workshop, offered by Georgia Bureau of Investigations, at IBSCA 2005, Savannah, GA, July 25, 2005.

PROFESSIONAL MEETINGS ATTENDED

IABD Annual Conference 2015, Orlando, FL

GRU Cyber Education Summit 2014, Augusta, GA

INTERFACE Security Conference 2011, 2012, 2013, 2014, Atlanta, GA

Atlanta CIO Executive Summit, 2009, 2010, 2012, 2013, 2014, 2015, Atlanta, GA (Evanta)

CIO Forum 2009, 2010, 2011,2012, 2014 Atlanta, GA (PEM/SIM)

EDUCAUSE 2013 Annual Conference, Anaheim, CA

National Initiative for Cybersecurity Education (NICE) Centers of Academic Excellence Workshop 2013, NIST (travel supported by NSF, sponsored by NSA & DHS), 2013, Washington DC

USG Annual Computing Conference 2007, 2008, 2009, 2010, 2011, 2012, Rock Eagle, GA

EDUCAUSE Annual Conference 2011, Philadelphia, PA
CIO Executive Summit 2008, 2009, 2010, 2011, 2012 Boston, MA
Campus Technology 2008, 2009, 2010, 2012, Boston, MA
EduComm/InfoComm 2010, 2011, Las Vegas, NV
CIO/CFO Technology Summit 2010, Phoenix, AZ
VoiceCon 2008, Orlando, FL
AACSU Technology & Learning Conference 2007, Orlando, FL
ACM SIGGRAPH 2001- 2008

PROFESSIONAL CERTIFICATIONS
Certified Information Systems Security Professional, valid through August 30, 2016.
    Certification ID #461583.
Georgia Teacher Certification, T7, Mathematics grades 6-12, valid through June 30, 2018. Certification ID
    #342516.

COURSES TAUGHT DURING THE PAST SEVEN YEARS

Semester	Course	Title	Enrolled
Fall Semester 2015	CSCI 3250	Computer Security	40
Fall Semester 2015	CSCI 3450	Intelligent Systems (2 sections)	60
Fall Semester 2007	PSYC 1001	Foundations of Leadership	20
Summer Semester 2015	CSCI 1301	Computer Science I	11
Summer Semester 2015	CSCI 1302	Computer Science II	19
Spring Semester 2015	CSCI 3660	Mobile App Development (2 sections)	54
Spring Semester 2015	CSCI 4700	Human-Computer Interaction	38
Spring Semester 2015	MGMT 6610	Information Management (MBA course)	16
Fall Semester 2014	CSCI 1302	Computer Science II	18
Fall Semester 2014	CSCI 3000	Web Programming	40
Fall Semester 2014	CSCI 3600	Computer Graphics	33
Fall Semester 2014	CSCI 4950	Senior Project in Computer Science	21
Summer Semester 2014	CSCI 1250	Information Technologies	23
Summer Semester 2014	CSCI 1302	Computer Science II	12
Spring Semester 2014	CSCI 3660	Mobile App Development (2 sections)	59
Spring Semester 2014	MGMT 6610	Information Management (MBA course)	21
Fall Semester 2013	CSCI 1302	Computer Science II	30
Fall Semester 2013	CSCI 3000	Web Programming	35
Summer Semester 2013	CSCI 4910	Internship In Computer Science	9
Summer Semester 2013	CSCI 1250	Information Technologies	19
Summer Semester 2013	CSCI 1302	Computer Science II	11
Spring Semester 2013	CSCI 4910	Internship In Computer Science	7
Spring Semester 2013	CSCI 1302	Computer Science II	29
Spring Semester 2013	MGMT 6610	Information Management	14
Fall Semester 2012	CSCI 1250	Information Technologies	59
Fall Semester 2012	CSCI 1302	Computer Science II	8
Fall Semester 2012	CSCI 3600	Computer Graphics	4
Spring Semester 2012	MGMT 6610	Information Management	14
Fall Semester 2011	CSCI 3000	Web Programming	15
Spring Semester 2011	MGMT 6610	Information Management	22
Spring Semester 2010	MGMT 6610	Information Management	24
Fall Semester 2008	CSCI 3000	Web Programming	7

TUTORIALS

3D Modeling & Printing, 3-hour workshop, Lumpkin County High School CBT classes, December 8, 2014.

Getting Started in Web and Mobile App Development, 3-hour workshop, Lumpkin County High School CBT classes, April 23, 2014.

Mobile App Programming 3-hour workshop, Youth Leadership Lumpkin, December 5, 2013.

Web App Programming, 3-hour workshop, Lumpkin County High School CBT classes, November 21, 2013.

Developed and delivered Web & Mobile Application Programming 3-hour workshop, Youth Leadership Lumpkin 2012, Technology Day, September 12, 2012.

Taught Summer Honors workshop, Intro to 3D Animation in Blender, summer 2006, outstanding course recognition.

Supervised one student in CSCI 4950 Senior Project research in an augmented reality digital image processing application, fall 2005.

PUBLISHED TEACHING MATERIALS

Online lesson videos/labs for CSCI 1250, 1302, 3000, 3660 available at **http://vimeo.com/ungcs**, 2012-present.

Programming 3D Graphics with OpenGL, online course module published via Rice University Connexions at **http://cnx.org/content/col10246**, 2004-present.

HONORS AND AWARDS

- Outstanding Advisor for Computer Science, UNG Student Government Association, April 22, 2015.
- Honorable Mention recognition as coach of ACM Southeast Programming Contest teams, 2014.
- Outstanding Advisor for Computer Science, UNG Student Government Association, April 23, 2014.
- Best Research Poster Award, Dahlonega Campus – UNG Annual Research Conference, April 2, 2014.
- Outstanding Advisor Award, UNG Student Government Association, March 28, 2013.
- Competent Communicator Award, Toastmasters International, August 2012.
- ESGR (Employer Support of the Guard and Reserve) Patriot Award for support of active duty staff, 2011.
- Atlanta Telecom Professional of the Year Finalist, Industry Category, 2010.
- Recipient of multiple graduating student recognition letters (NGCSU), 2000-2003 and 2005-2009.
- Outstanding Faculty Member recognition from Student Government Association, 2007.
- Center of Teaching & Learning Excellence's Instructional Technology Innovation Award, 2006.
- Honorable Mention recognition as coach of ACM Southeast Programming Contest team, 2006.
- Center of Teaching & Learning Excellence's Instructional Technology Innovation Award, 2006.
- Summer Honors Program 2006 Meritorious Service course recognition for 3D animation seminar and hands-on workshop.
- "I Caught You Caring" Award Recipient (GC&SU), March 2005.
- Recipient of multiple graduating student recognition letters (GC&SU), 2003-2005.

ACADEMIC ADVISEMENT

Advised over 60 students per semester, guided numerous students to graduation in 4 years or less, and wrote more than 20 letters of recommendation leading to employment or graduate program acceptance.

COMMITTEE SERVICE
Department Committees

Chair, 2 Assistant Professor of CS Search Committees, 2015.
Departmental Promotion & Tenure Committee, 2014-present.
Computer Science Curriculum Committee, 2006-2008, 2012-present.

College Committees
MCCB Curriculum Committee, 2014-present.
Chair, Mike Cottrell College of Business Mission Review & Revision Committee, 2013-2014.
MCCB Graduate Committee, 2013-present.
MCCB Promotion & Tenure Committee, 2012-2013.

University Committees
UNG Faculty Senate, member-at-large, 2015-2017.
Search Committee for Policing position (related to CyberSecurity), Dept of Criminal Justice, 2014-2015.
Executive Committee, UNG Faculty Senate, 2013-2014.
UNG Faculty Senate, member-at-large, 2013-2014.
Academic Affairs Committee, 2013-2014.
Search Committee for Digital Commons & Special Collections Librarian, UNG Libraries, 2013.
Intellectual Property and Academic Freedom Ad Hoc Committee, 2013. Drafted new intellectual property
    policy and financial model for UNG; updated academic freedom and consulting statements.
UNG Vision & Mission Planning Team, 2012-2013. Developed new UNG mission statement.
Strategic Planning/Environment Scan Task Force, Science & Technology representative, 2012-2013.
Search Committee for Director of the Center for the Future of North Georgia, Mike Cottrell School of
    Business, 2012.
Multiple Consolidation Planning Workgroups for UNG (six total), 2012-2013.
Faculty/Staff Campaign Co-Chair, Advancement Annual Giving drive, 2009-2010.
Campus Communications Group, member 2008-2012
Information Security Oversight Committee, chair 2007-2012.
Library Committee, 2006-2012.
University Press of North Georgia, board member 2006-present.
QEP Steering Committee, Co-Director 2006, member 2006-2011.
President's Leadership Council (formerly President's Cabinet), 2006-2011.
University Technology Committee, Chair 2006-2007, member 2006-2012.
Student Technology Fee Committee, 2006-2012.
Faculty Senate, elected as member-at-large, 2006-2007.

University System Committees
USG Cyber Security Task Force, 2014-present.
Search Committee for CTO of Abraham Baldwin Agricultural College, 2013-2014.
Past Chair, University System of Georgia Regents' Administrative Committee on Information Technology
    (ACIT) CIO Advisory Council, member 2006-2012, Chair 2010-2011.
USG Audit Advisory Committee, 2010-2012. Participated in development of the IT Handbook for use by
    USG Audits Team.
USG Vice Chancellor for IT/CIO search committee, June-October 2009.
ACIT Executive Committee, 2009-2012.
USG ITS Software Resources & Services Advisory Committee, 2008-2012.

National or International Committees
ACM SIGGRAPH Education Committee, Open Source Coordinator, 2006-2007.
National Council of Teachers of Mathematics, NCTM 2007 Conference Local Arrangements Committee,
    Volunteers Co-Chair.

PROFESSIONAL ORGANIZATIONS
Statewide or Regional Organizations
North Georgia Toastmasters, charter member, 2009-2014.
Georgia Council of Teachers of Mathematics, Webmaster, 2002-2007, member 1999-2008.

National or International Organizations
International Information Systems Security Certification Consortium (ISC)^2, 2013-present
Rotary International, 2011-present, Dahlonega Rotary Club Foundation Chair, 2014-2015
ACM SIGGRAPH (Special Interest Group for computer graphics), 2002-present
ACM (Association for Computing Machinery), 2000-present
CIO Executive Council, 2010-2013
IEEE Computer Society, 2005-2010

OTHER SERVICE
Emcee, ConnectAbility Talent Shows 2013-2015, event supporting children and adults with disabilities.
Lumpkin County High School CTAE Advisory Committee, Lumpkin County Schools, 2014-present.
Faculty co-sponsor for ACM Student Chapter, 2014-present.
CS Programming Team Faculty Co-Sponsor, 2005-present.
Hour of Code sponsor, NextGen Youth Clubhouse, Dawson County Schools, 2013-2014.
North Georgia Network Board of Directors, 2011-present.
North Georgia Network Community Advisory Board Chair, 2011-present, Member 2010-present.
Georgia Communications Cooperative, Nominations Board, 2013-2014.
Technology Day Coordinator, Youth Leadership Lumpkin 2012, September 12, 2012.
Managing Partner, Dahlonega Investors' Group, L.P., 2001-2013. Managed investments for a 12-member investment club partnership with over $150,000 in assets.
Served as invited speaker and panel member for numerous IT professional organizations in Atlanta area 2009-2012, including TechLinks, ATP (Atlanta Telecom Professionals), AITP (Association of IT Professionals), CIO Roundtable, and SIM (Society of Information Managers).

ADDITIONAL INTERESTS
Advanced proficiency in spoken and written Spanish and French, intermediate-level Russian, conversant in Mandarin Chinese.
Traveled on 10 humanitarian/mission trips to South America and southeast China in the past 15 years, including serving as translator for medical, dental, and construction missions.