

# Russell F. Thackston

## Assistant Professor

Department of Information Technology  
College of Engineering and Computing  
Georgia Southern University, Statesboro, Georgia

## Education

- ❑ PhD, Computer Science and Software Engineering, Auburn University, Auburn, AL. Dissertation topic: *Individual Software Effort Estimation*. Graduated 2013. (4.0 GPA).
- ❑ MS/CIS, Georgia State University, Atlanta, GA. Graduated 2006. (4.0 GPA).
- ❑ BBA/MIS, Georgia Southern University, Statesboro, GA. Graduated 1996. (3.6 GPA).

## Work Experience

### Teaching

- ❑ Georgia Southern University, Statesboro, GA (August 2013 - Current), *Assistant Professor*, Department of Information Technology
- ❑ Auburn University, Auburn, AL (August 2010 - December 2010), *Graduate Teaching Assistant*, Dept. of Comp. Science and Software Engineering
- ❑ Georgia Southern University, Statesboro, GA (August 2007 - December 2007), *Temporary Instructor*, Department of Information Systems
- ❑ Georgia Southern University, Statesboro, GA (October 1994 - March 1996), *Staff Trainer*, Department of Human Resources
- ❑ Southern Center for Continuing Ed., Statesboro, GA (August 1993 - July 1995), *Instructor*

### Industry

- ❑ Self-Employed (August 1994 - Present), *Independent Software Consultant*
  - Advised clients on business solutions design, systems development, and mobile and web design/development/SEO.
- ❑ Alabama Cooperative Extension (September 2010 - August 2013), *Application Architect*
  - Designed, implemented, and supported educational iPad application, incorporating multi-touch, interactive learning, audiovisual, and game elements.  
<<http://www.aces.edu/family-health/health-nutrition/bodyquest/>>
- ❑ Total System Services, Columbus, GA
  - *Senior Client-Server Software Analyst* (April 2008 - June 2009)
    - Directed the technical implementation of company-wide IT portfolio management software.

- *Senior MIS Analyst (March 1996 - June 1998)*
  - Performed full life-cycle development and support for corporate project tracking, data warehousing software, and automation/data validation tools.
  
- ❑ *Daugherty Business Solutions, Atlanta, GA (December 2002 - January 2008), Consultant*
  - Georgia State Road and Tollway Authority – Engineered statewide, account management web portal and retail integration web services.
  - The Home Depot (Mobile Ordering) – Developed international mobile inventory management and ordering software.
  - State of Georgia/Department of Human Resources – Developed web application for statewide incident reporting.
  - State of Georgia/Georgia Technology Authority – Enhanced their web-based survey tool, including design, development, and implementation support.
  - The Home Depot (Point of Sale) – Developed web-based services for credit card transaction processing.
  
- ❑ *Lectra Systems, Marietta, GA (November 2000 - December 2002), Senior Analyst*
  - Performed full life-cycle development and support for Textile Product Design Management application in use by clients in over 100 countries.
  
- ❑ *The Home Depot, Atlanta, GA (June 1998 - November 2000), Senior Systems Engineer*
  - Technical lead for 15 member software development team charged with designing and producing a new point-of-sale application for use in 2,000+ stores in five countries.
  
- ❑ *GSU Computer Services, Statesboro, GA (July 1992 - October 1994), Hardware/Software Technician*
  - Provided hardware and software support campus-wide and advised various departments on automation technologies.
  
- ❑ *USAF, Air Force Academy, Colorado Springs, CO (January 1988 - January 1992), U.S. Air Force Security Police, Law Enforcement Specialist*
  - Performed law enforcement duties.
  - Active duty deployment during Desert Storm/Desert Calm

## Courses Taught

Course	Title	Typical Class Size
<b>Georgia Southern University (Assistant Professor, 2013-Present)</b>		
IT 1130	Introduction to Information Technology	30
IT 1430	Web Page Development	25
IT 3130	Web Application Design and Development I	30
IT 3234	Systems Acquisition, Integration, and Implementation	25-35
IT 5233	Web Security	30-35
IT 5236*	Mobile Web Infrastructure	25-35
CISM 2030	Introduction to Information Systems	38
FYE 1000	Conversations with Professors	30
* Includes both graduate and undergraduate sections		
<b>Auburn University (Graduate Teaching Assistant)</b>		
COMP 1000	Personal Computer Applications	50-60
COMP 5700	Software Process	40
<b>Georgia Southern University (Instructor, 2007)</b>		
CISM 2530	Advanced Business Applications	30
CISM 4130	Management Information Systems	24

## Journal Publications

- ❑ Ryan C. Fortenberry, Russell Thackston, "Quantum Chemical Spectral Characterization of CH<sub>2</sub>NH<sub>2</sub><sup>+</sup> for Remote Sensing of Titan's Atmosphere," *Icarus*, 1 January 2018. <<https://doi.org/10.1016/j.icarus.2017.07.029>>. Impact factor 3.131.
- ❑ Ryan C. Fortenberry, Russell Thackston, Joseph Francisco, Timothy Lee, "Toward the Laboratory Identification of the Not-So-Simple NS<sub>2</sub> Neutral and Anion Isomers," *Journal of Chemical Physics*, July 2017. <<http://dx.doi.org/10.1063/1.4985901>> Impact factor: 2.965.
- ❑ Russell Thackston, Ryan C. Fortenberry, "An Efficient Algorithm for the Determination of Force Constants and Displacements in Numerical Definitions of a Large, General Order Taylor Series Expansion," *Journal of Mathematical Chemistry*, 27 July 2016. <<https://doi.org/10.1007/s10910-017-0783-3>>. Impact factor 1.308.
- ❑ Russell Thackston, Ryan C. Fortenberry, "Optimal cloud use of quartic force fields: The first purely commercial cloud computing based study for rovibrational analysis of SiCH<sub>3</sub>," *International Journal*

of Quantum Chemistry, 27 August 2015, cover article, pg 1650-1657.

<<http://dx.doi.org/10.1002/qua.24997>>. Impact factor: 3.589.

- ❑ Russell Thackston, David Umphress, "SISE: A Novel Approach to Individual Effort Estimation," *CrossTalk – The Journal of Defense Software Engineering*, May/June 2015, pg 25-30. <<http://www.crosstalkonline.org/storage/issue-archives/2015/201505/201505-Thackston.pdf>>
- ❑ Russell Thackston, Ryan C. Fortenberry, "The performance of low-cost commercial cloud computing as an alternative in computational chemistry," *Journal of Computational Chemistry*, 9 March 2015, cover article, pg 926-933. <<http://dx.doi.org/10.1002/jcc.23882>>. Impact factor: 3.589.
- ❑ Russell Thackston, David Umphress, "Micropreneurs: The Rise of the MicroISV," *IT Professional*, March/April 2013, pg 50-56. IEEE Computer Society Digital Library. IEEE Computer Society, <<http://doi.ieeecomputersociety.org/10.1109/MITP.2012.28>>. Impact factor 0.819.
- ❑ Russell Thackston, David Umphress, "Individual Effort Estimation: Not Just for Teams Anymore," *CrossTalk – The Journal of Defense Software Engineering*, May/June 2012, pg 4-7. <<http://www.crosstalkonline.org/storage/issue-archives/2012/201205/201205-Thackston.pdf>>

## Paper Presentations

### Conferences

- ❑ Russell Thackston, Chris Kadlec, Elizabeth Rasnick. "Case Study: Lessons Learned While Laying The Foundation For A High School Computer Science Curriculum." *21<sup>st</sup> Southern Association for Information Systems Conference*. Atlanta, GA. 23-24 March 2018. <<http://southernais.org/sais2018program/>>
- ❑ Russell Thackston, Jeffrey P. Kaleta. "Exploring User Privacy Based On Human Behavior With Internet Of Things Devices At Home (Formative Research)." *21<sup>st</sup> Southern Association for Information Systems Conference*. Atlanta, GA. 23-24 March 2018. <<http://southernais.org/sais2018program/>>
- ❑ Russell Thackston, Chris Kadlec. "Transforming a LAN Party into a Classroom." *20<sup>th</sup> Southern Association for Information Systems Conference*. St. Simons Island, GA. 24 March 2017. <<http://aisel.aisnet.org/sais2017/>>
- ❑ Russell Thackston, Ryan C. Fortenberry. "High Performance Computing: Considerations When Deciding To Rent or Buy." *18<sup>th</sup> Southern Association for Information Systems Conference*. Hilton Head, SC. 20-21 March 2015. Session 3A. <<http://aisel.aisnet.org/sais2015/>>
- ❑ Russell Thackston, Ryan C. Fortenberry. "How to Conduct Cloud-Based Student Labs in Your Classroom." *Georgia Scholarship of Teaching & Learning Conference*, Nessmith-Lane Conference Center, Statesboro, GA, 6 March 2015. <<http://digitalcommons.georgiasouthern.edu/stem/2015/2015/2/>>

## Invited Talks

- ❑ Russell Thackston, Ryan C. Fortenberry. "An efficient algorithm for the determination of force constants and displacements in numerical definitions of a large, general order Taylor series expansion." *American Mathematical Society*, Special Session on Mathematical Chemistry, Vanderbilt University, Nashville, TN. 14-15 April 2018.  
<[http://www.ams.org/meetings/sectional/2255\\_progfull.html](http://www.ams.org/meetings/sectional/2255_progfull.html)>

## Professional Meetings

- ❑ Russell Thackston, Brandon Kimmons, Ryan C. Fortenberry. "Computational chemistry: Practical issues in leveraging the Cloud." *American Chemical Society 249th Annual Meeting: Division of Chemical Education (CHED)*, Sheraton Denver Downtown Hotel, Denver, CO. 22-26 March 2015. Session 1803.  
<<https://ep70.eventpilot.us/web/page.php?page=Session&project=ACS15spring&id=2142383>>

## Funding Proposals

### External Research Proposals

- ❑ "A Software Element for Managing and Analyzing Massively Large Calculation Sets with Heterogeneous Public Cloud Computing Platforms," **National Science Foundation**, Cyberinfrastructure for Sustained Scientific Innovation, PI. \$475,877, April 2018. Unfunded.
- ❑ "AGCO Kiosk Elaboration," AGCO, Your Agriculture Company. Research proposal to design and develop an Internet of Things (IoT) marketing kiosk, Co-PI. \$56,000, May 2016. Unfunded.
- ❑ "Computational Chemistry Server Images on Microsoft Azure," Microsoft Azure Research Award Program, PI, September 2015. \$64,800. Unfunded.
- ❑ "Low-Cost Computational Chemistry Education and Research Tools from LiveUSB Computing," **National Science Foundation**, Division of Computer and Network Systems: Computer Systems, September 2015, Co-PI. \$275,552. Unfunded.
- ❑ "Computational Chemistry Server Images on Amazon AWS," Amazon AWS in Education Research Grants program, PI. August 2015. \$20,000. Funded.
- ❑ "Low-Cost Cloud Computing for Interdisciplinary Computational Chemistry Education and Research," **National Science Foundation**, Division of Computer and Network Systems: Computer Systems, PI. \$445,960, January 2015. Unfunded.

### Internal Research Proposals

- ❑ "Desktop-Managed High Performance and Grid Computing for the Cloud," Allen E. Paulson College of Engineering & Information Technology, IT Faculty Research Grant, PI, AY 2017-2018. \$10,000. Funded.
- ❑ "Exploring User Privacy Based On Human Behavior With Internet Of Things Devices At Home," Faculty Research Seed Grant, Co-PI, October 2017, \$7,857.54. Unfunded.

- ❑ "*The Performance of Low-Cost Commercial Cloud Computing as an Alternative in Computational Chemistry*," Faculty Research Scholarly Pursuit Funding, PI, February 2014. \$5,000. Unfunded.
- ❑ "*Low-Cost Cloud Computing for Interdisciplinary Computational Chemistry Education and Research*," Allen E. Paulson College of Engineering & Information Technology, Faculty Research Seed Grant, PI, AY 2014-2015. \$9,500. Funded.

## Instructional Funding

- ❑ Amazon AWS Educate Member Institution, AY 2018-2019. Approximately \$10,900 for services-in-kind. Funded.
- ❑ Amazon AWS Educate Member Institution, AY 2017-2018. Approximately \$3,200 for services-in-kind. Funded.
- ❑ Amazon AWS Educate grant, AY 2016-2017. Approximately \$2,325 for services-in-kind. Funded.
- ❑ Amazon AWS Educate grant, AY 2015-2016. Approximately \$2,700 for services-in-kind. Funded.
- ❑ Amazon AWS Education grant, AY 2013-2014. \$6,000 of services-in-kind for use in student instruction. Funded.

## Technical-Professional Consulting

- ❑ "*RailsBridge: Front-End Web Development: HTML, CSS and Some Javascript*." Armstrong Atlantic State University, 16 November 2013. Provided hands-on assistance to RailsBridge students in completing the seminar activities.
- ❑ Advisor to the Board, ChelloTrends <<https://www.chellotrends.com/>>. Provided business and technical guidance for startup activities. 2014 - current.

## Officerships In Professional Associations

- ❑ Board member and Chair of Marketing and Communication for the Southern Association for Information Systems (SAIS). AY 2015-2018.

## Attendance At Professional Association Meetings

- ❑ Southern Association for Information Systems (SAIS). March 2015, 2016, 2017, 2018.
- ❑ American Mathematical Society (AMS). April 2018.
- ❑ American Chemical Society (ACS) Annual Meeting & Exposition. March 2015.
- ❑ Special Interest Group for Information Technology Education / Research in Information Technology (SIGITE / RIIT). October 2014.

## University Committee Assignments

- ❑ University Conduct Board (AY 2015-2018)
- ❑ Library Committee Chair (AY 2016-2018)
- ❑ Library Committee (AY 2014-2018)

## College Committee Assignments

- ❑ College Curriculum & Programs Committee (AY 2016-2018)
- ❑ College Research Committee (AY 2015-2017)

## Department of IT Committee Assignments

- ❑ Chair Curriculum Committee (AY 2017-2018)
- ❑ Curriculum Committee (AY 2014-2017)
- ❑ Promotion and Tenure Committee (AY 2016-2017)
- ❑ Limited Term Instructor Search Committee (2017)
- ❑ Strategic Planning Committee (AY 2015-2016)
- ❑ Department Chair Search Committee (AY 2014-2015)
- ❑ Chair Lecturer Search Committee (2015)

## Student Advisement

The College of Engineering and Information Technology provides formal academic advisement through the college's Student Service Center. However, I seek out opportunities to interact with and advise students on academic, professional, and personal topics, including the following examples:

- ❑ *FYE 1000 (First-Year Experience)*. Although this course is designed to assist students in dealing with the first week of classes and helping them understand the student-faculty relationship, the topics of discussion invariably turn to larger issues, such as choice of major, career opportunities, and specializations. I welcome these discussions and often have students follow up with me weeks or months later.
- ❑ *Living-Learning Communities (LLC)*. I volunteer to speak with students about college life, career opportunities, and professional development. I am still in contact with many of the students I interact with in these forums.
- ❑ *Association of Information Technology Professional (AITP)*. In Fall 2016, I assumed responsibility as the faculty sponsor for the Georgia Southern student chapter of the AITP. As the University's representative within the AITP, my responsibilities focus on advising the student leadership. In addition, I attend nearly every on-campus and off-campus function sponsored by AITP. For example, I personally attend the AITP's TekLAN event, a student gaming event that takes place twice a semester, lasts arounds fourteen hours, and attracts over 100 participants.
- ❑ Every semester, I'm approached by non-IT majors – usually taking my IT 1130 class – who wish to discuss academic and career options. These students typically contact me later to report that I provided them critical (and helpful) assistance in their decision-making process for changing majors.

## Other Service Activities

- ❑ Reviewer for three conferences and one journal.
- ❑ Graduate thesis/project committee member (four students).
- ❑ Student advisement and support activities within the department, college, and university.
- ❑ Advisor to the local *Association of Information Technology Professional* student chapter.
- ❑ Statesboro High School Tech Trek, lead organizer.

- ❑ Statesboro High School Tech Club, organizer, instructor, advisor.
- ❑ A Day for Southern coordinator.
- ❑ Commencement Host volunteer.
- ❑ Conducted information session on Amazon Web Services for CEIT faculty.
- ❑ Involved in the development of a student-oriented High Performance Computing Partnership with Gulfstream Corporation.
- ❑ Assessment & support activities for the ABET accreditation visit.
- ❑ Conducted Research Methods presentations for graduate students.
- ❑ Multiple after-hours workshops for students related to STEM.

## Continuing Education Activities

### External

- ❑ *AWS Public Sector Summit*, Washington, DC. Public sector conference on cloud technologies. 2018, 2016.
- ❑ *NSF Day*, Birmingham, AL. Educational seminar on preparing successful NSF proposals. 2018.
- ❑ National Convergence Technology Center presents *Winter Working Connections: Attacking and Defending Web Applications*. Educational seminar on web security. 2016.
- ❑ Technology Association of Georgia (TAG) presents *What Mobile Applications and the IoT mean to the Future of your Business with Georgia Tech and Gulfstream*. 2015.
- ❑ *AWSome Day 2014*. Amazon Web Services educational seminar.
- ❑ Technology Association of Georgia (TAG) presents *Mobile Strategy at Gulfstream Aerospace Corporation*. 2014.

### Georgia Southern/CT<sup>2</sup> and USG Training

- ❑ Safe Space Training. 2018.
- ❑ How to Create a Teaching Portfolio. 2015, 2013.
- ❑ Engaging Students Through Discussion. 2015.
- ❑ MERLOT 101: Finding, Evaluating, and Integrating Open Educational Resources into Your Courses. 2014.
- ❑ Accessibility Considerations for Desire2Learn Courses. 2014.
- ❑ Accessibility Solutions for Online Educational Environments. 2014.
- ❑ Introduction to the Scholarship of Teaching and Learning. 2014.
- ❑ Special Topics in Research Administration. 2014.
- ❑ Classroom Management 1001: Dealing with Disruptive Behavior. 2013.
- ❑ Echo360 Audio/Video capture seminar. 2013.
- ❑ Open access seminar. 2013.
- ❑ Introduction to Online Teaching & Learning. *Certificate issued*. 2013.
- ❑ Working Qualitatively. 2013.
- ❑ Design Multiple Choice Tests to Foster Student Learning. 2013.
- ❑ Develop Rubrics to Accurately & Consistently Measure Learning Outcomes. 2013.



## Other Noteworthy Activities Not Fully Covered Above

- ❑ Over multiple years, I have received a Amazon teaching grants for services-in-kind on the Amazon Web Services platform. This grant provided students the opportunity to utilize enterprise-level hardware, software, and services in a classroom learning environment. AY 2013-2018.
- ❑ Statesboro High School educational partnership. 2017-2018.
  - I worked with faculty at the high school to conceptualize, develop, and implement a technology showcase event called Tech Trek for high school students. Over 450 students attended the event, where they learned about technology, academics, and careers in IT. This event will be repeated each school year and will serve as a model for IT education/recruitment events at other schools in the region.
  - I am working with faculty at the high school to implement an after school "tech club" to help educate, inspire, and recruit students into the STEM field. The club will meet one day each week and I will be responsible for facilitating/teaching bi-weekly.
- ❑ I have been instrumental in developing a partnership between Gulfstream Corporation and the Department of Information Technology. This partnership has produced several positive results, including multiple computing hardware donations (listed below) and additional student employment opportunities. 2015.
  - CEIT Mac Lab consisting of eighteen Mac Mini computers valued at \$11,000.
  - CEIT Mobile Device Lab consisting of forty Phone/iPad devices.
- ❑ I developed a proficiency exam for IT 1130, Introduction to Information Technology. This exam has been administered to one student and serves as another avenue for advanced students with industry experience to receive credit for the course. AY 2015.
- ❑ I successfully solicited and secured a computing hardware donation by Acuity Brands Lighting. This hardware – valued at \$4,500 – has directly supported student learning activities in venues such as our IT Capstone course for senior students. 2014.