

**CHERYL D. SEALS, Ph.D.**

Professor - Computer Science & Software Engineering  
Shelby Center for Engineering Technology Suite 3101M (334) 844-6319(CSSE)  
Auburn University- Auburn University, AL 36849  
sealscd@auburn.edu @cheryldseals (twitter)  
<http://www.eng.auburn.edu/~sealscd>

**EXECUTIVE SUMMARY OF QUALIFICATIONS**

***Experience***

***Work related to outreach highlighted***

- 19 years of experience in Auburn University Samuel Ginn College of Engineering – Professor of CSSE.
- 12 years of experience as a Member of Alabama Power Academic Excellence Advisory Board.
- 18 months of experience as Acting Director Alabama Power Academic Excellence Program.
  - Scholarship Management and scholarship awarding for over 160 awards.
  - 16 Professional development activities coordinated and organized for students, Sunday Tutorial, etc.
  - Recruiting of students for Auburn University AEP, undergraduate and graduate engineering.
  - Student mentoring and academic counseling and providing activities promoting student success.
  - Assist in interviewing and hiring coordinators and student personnel
  - Prepare program reports for College and Funding Agency
- 5 years of industry experience Bell Communications/Bellcore/Telcordia-MTS, and IBM/ISSC-Application Integrator

***Leadership***

- Leadership: ELATES Presidential Fellowship 2022-2023
- Leadership: Presidential Taskforce for Opportunity and Equity 2021-2022
- Leadership: AU/TU Collaboration on Health Disparities - collaboration of Auburn & Tuskegee presidents 2020-2021
- Leadership: University Senate, Steering Committee 2020-2022
- Leadership: Co-Executive Director of iAAMCS.org Institute of African Americans Mentoring Computer Science.
- Leadership: SGCOE Research Colloquium to improve communications thru information & informal networking.
- Leadership: STARS Executive Steering Committee starsalliance.org since 2006-2019, STARS Committee Co-Chair.
- Leadership: Co-Chair Computing Research Association – Women / Coalition to Diversity Computing CRA-W/CDC Distinguished Lecturer Series sponsored by Computing Research Association.
- Provided leadership and direction to the Alabama Power Academic Excellence Program team 2014-2015.
- Experience developing relationships with Alabama Power and other corporate friends of Auburn University 14-2015.
- Leadership: National, Committee Co-Chair ACM SIGCSE 2014/2015.
- Leadership: National Conference, Committee Chair NSBC funded by NSF iAAMCS.org 2014-2019.
- Leadership: AU Faculty Advisor to Auburn SWE, Tiger Dev (Game Dev), AUCGC (Computer Gaming Club).

***Research & Development***

- Strong communication and presentation skills and invited to give over 60 talks on research, mentoring or student professional development.
- Strong development member for Auburn research organization with collaborative grants more than \$17M with Auburn University share \$3.9M through 30 grants (also 1 grant under review for \$1.5M).
- Strong researcher having supervised and graduated over 89 graduate students (not including committees).
  - 14 PhD, 77 MS Grad; 41 REUs; over 75 undergraduate researchers >100 REUs and undergrad researchers.
  - More than 80 publications: 30 Journals; 51 Conferences (33 Moderately to Highly Competitive/Esteemed Conferences; 20 other conferences referred pubs); two book chapters, one AU invention filed copyright application; over 75 Invited Talks; over 50 Research and/or CompSci-centric outreach exhibitions.

***Outreach & Student Development***

Since 1998, Dr. Seals has worked with retention and outreach scholarship programs to improve STEM education at all levels: K-12 (e.g., Upward Bound, Boys & Girls Clubs), undergrad (e.g., tutoring) & graduate supervision, and support of National programs.

- Faculty Outreach Ambassador
  - Serving Local and National community over 12 years providing over 2500 hours per year of community outreach service to K-12 schools through STARSalliance.org > 25000 hours community outreach.
  - Provided CSSE tutoring, service learning and research opportunities for students 2006-2018 through Starsalliance.org and peer tutoring for the department for twelve years.
- Development efforts to support SWE student organization.

## PROFESSIONAL EXPERIENCE

**2020 – Present Endowed Professor - Computer Science and Software engineering**, Auburn University

**2019 – Present Professor - Computer Science and Software engineering**, Auburn University

**5.2014-1.2016 Alabama Power Academic Excellence Program. – Acting Director**, Auburn University

- Scholarship Management and scholarship awarding for over 160 awards.
- 16 Professional development activities coordinated and organized for students, Sunday Tutorial, etc.
- Recruiting of students for Auburn University AEP, undergraduate and graduate engineering.

**2010 – 2019 Associate Professor**, Auburn University

**Ph.D., Computer Science**, *Virginia Polytechnic Institute and State University*.

- Strong communication and presentation skills and invited to give over 50 talks on research, mentoring or student professional development.
- Research Funding with collaborative grants more than \$14,083,669 with Auburn University share \$3,246,323 through 28 funded grants (with additional approx. \$3.0M under review in 2022).
- Research Direction with graduating over 80 graduate 12 PhD, 78 MS; 10 current PhD, supervised 35 REUs and approx. 80+ publications (2BC; 30 Journal; 52 conference proceedings).
- Developed and Teaching/Taught 8 courses to Computer Science Graduates and Undergraduates
- Outreach; Serving 2500 hours of community outreach for over 10 years.
- Service; Strong Service at all levels department, college, university and national

**5.2014-1.2016 Alabama Power Academic Excellence Program. – Acting Director**, Auburn University

- Scholarship Management and scholarship awarding for over 160 awards.
- 16 Professional development activities coordinated and organized for students, Sunday Tutorial, etc.
- Recruiting of students for Auburn University AEP, undergraduate and graduate engineering.
- Student mentoring and academic counseling and providing activities promoting student success.
- Assist in interviewing and hiring coordinators and student personnel
- Prepare program reports for College and Funding Agency and Engineering Advisory Board
- Management of dept. resources and processes for 3 direct reports and approx. 300 students.
- Additional support of AEP summer bridge program 1-month summer 2016; REUs Sum2017-2019.

**2004-2010 Assistant Professor - Computer Science and Software engineering**, Auburn University.

- Developed and delivered 2 additional computing graduate and undergraduate courses
- Research Funding through winning collaborative grants
- Research Direction; graduating first 20 MS graduate students and first PhD and first 12 REUs and first 10 Journal articles.

**2003-2004 Instructor- Computer Science and Software engineering**, Auburn University.

- Delivered undergraduate theoretical computing course in Artificial Intelligence

## EDUCATION

**2004 Ph.D., Computer Science**, *Virginia Polytechnic Institute and State University*.

Dissertation Title: A Framework for Reuse in Visual Programming Environments:

Supporting Novice Programmer Development of Educational Simulations

Advisor: Dr. Mary Beth Rosson

**1997 M.S., Computer Science**, *Virginia Polytechnic Institute and State University*.

**1995 M.S., Software Engineering**, *North Carolina Agricultural & Technical State University*

(Inducted into Upsilon Pi Epsilon Computer Science Honor Society)

**1993 B.S., Mathematics Education**, *Grambling State University*, Grambling, Louisiana.

**1990 B.S., Computer Science**, *Grambling State University*, Grambling, Louisiana.

(Inducted into Kappa Delta Pi Education Honor Society)

## Research Statement

### HCI, Advanced Learning Technology and AR/VR Advanced Learning Technologies

My research focuses on Human-Computer Interaction and developing applications to improve the usability of products for many different populations. In many cases, we work to develop strategies for reuse by identifying and developing strategies, which will facilitate novice programmers to create simulations. Work with the novice community is realized with end-user programming/visual programming techniques and reduces the cognitive baggage of having to first learn to program to attain this goal. One community of study interest is K-12 teachers and their students with End-User Programming techniques. My work with the computer science community facilitates student engagement by creating applications to increase intrinsic motivation. My areas of specialization in Human-Computer Interaction are the following: User Interface Design, Usability Studies, Educational Game Design & Development, and Computer Supported Collaborative Work supporting K-12 and Senior Citizen communities. Some of my human-centric computing research leverages the pervasive nature of computing through social media, networks and we have studied many social medial applications and phenomena like Facebook, Twitter, WebCT, Moodle, Edmodo, etc. and have found that these applications have been very successful and transformative to our ways of thinking about and interacting with others.

Our team strives to improve the User Experience in phonetics and linguistic education through research in developing Advanced Learning Tools, and other tools in Augmented and Virtual Reality in multiple content areas (i.e., osteopathic medical, Building Sciences, Civil Structures, Computational Thinking, and Computer Science).

### Contracts/Grants Funding Total: \$17,199,181 - AU Share \$3,954,835

Note: 28 grants with 17 funded by the National Science Foundation and 10 intramurally funded by the Auburn VP of Research or VP of Outreach. Collaborative scholarship is fundamental to research in the areas of Human Computer Interaction and Broadening Participation (i.e., to improve ecosystems), therefore the majority of this funded research is dependent on building strong national research communities with 3 grants under NSF review (approximately \$1M). **Outreach /Broadening Participation Emphasis.**

1. **Seals, C., Principal (15%), "BPC-AE: NSF BPC-AE, The Evolution of the Institute for African-American Researchers in Computing Sciences"**, NSF BPC, Federal, \$2.5M Start of funding: October 2022, End of funding: September 2025.
2. **Davis, E. & Seals, C., Co-Principal (50%), "Promoting DoN STEM Careers via STEM Educational Activities"**, NSF BPC, Federal, \$ 615,512 Start of funding: September 2021, End of funding: August 2024.
3. **Seals, C., Principal (15%), "BPC-A: NSF BPC-A, IAAMCS The Alliance for African-American Researchers in Computing Sciences"**, NSF BPC, Federal, \$25,000 Start of funding: September 2020, End of funding: August 2021.
4. Mulligan-Guy, K., Brown, C., et al., **Seals, C.** (senior personnel). Collaborative Approaches among Scientists and Engineers (CASE) REU. NSF REU Federal AU \$400,879. Start of Funding May 2020 – End of funding April 2023.
5. **Seals, C., AU Principal (100%), " VCOM and Auburn Univ: The Design and Development of an Augmented Reality Training System"**, Edward Via College of Osteopathic Medicine INCLUDES, National, \$48,000. Start of funding: January 2019 - End of funding: July 2020.
6. **Cook, T. & Seals, C., Senior Personnel (15%), "Building an Ecosystem for Broadening Participation for Computing: 4-H and the Land-Grant system"**, NSF through National 4-H Council subcontract, National, Extension/AU \$9,000. Start of funding: January 2020, End of funding: June 30, 2020.

7. Seals, C., AU Principal (5%), **"NSF INCLUDES: Makerspace with Tuskegee University"**, NSF INCLUDES, Federal, AU \$7,550. Start of funding: September 2017, End of funding: August 2019. This is preliminary proposal award and we will submit \$12M INCLUDES Spr2020 (AU potential \$800K).
8. Seals, C., Principal (15%), **"BPC-AE: NSF BPC-AE, IAAMCS The Alliance for African-American Researchers in Computing Sciences"**, NSF BPC, Federal, \$317,667.00 Start of funding: May 2013, End of funding: August 2019. This proposal has been invited to submit one more cycle. a continuing award and PIs will submit \$7M renewal BPC-Alliance July2019 (AU potential \$500K).
9. Seals, C., Principal (15%), **"BPC-AE: The STARS Alliance (STARS3): A National Community for Broadening Participation through Regional Partnerships"**, NSF BPC, Federal, \$104,075.00 Start of funding: August 2011, End of funding: December 2017.
10. Baskiyar, S., (PI), Seals, C., Co-Principal (15%), **"Educating Talented Scholars in Computer Science and Software Engineering"**, NSF, Federal, \$625,000.00. Start of funding: August 2010, End of funding: June 2018.
11. Yu, W., Principal, Seals, C., Co-Principal (15%), Tian, H., Co-Principal, Pindzola, M., Co-Principal, **"CNS1059376, II-New: A Compute and Storage Cluster for Multidisciplinary Research on Computer Systems and Scientific Simulations"**, NSF CNS, Federal, \$458,685.00. Start of funding: March 2011, End of funding: March 2014.
12. Cook, J., Principal (60%), Seals, C., Co-Principal (40%), **"For Youth, for Life: An eLearning Environment for Youth: A Proposal in Response to Auburn University Intramural Grants Program"**, Auburn University Vice President of Research, Auburn University, \$150,000.00. Start of funding: February 2011, End of funding: February 2013.
13. Seals, C.D, Morris, S.M., Thomas, C.M., Tripp, L.O. & Lovett, G., **AU Outreach Scholarship Grant 2010: KEMET Academy (Knowledge, Excellence in Mathematics Equilibrium and Technology)**, 5/2010 –5/2011, \$20,000.
14. Dozier, G.V. (PI-NCA&T), Seals, C.D. (Auburn PI), **Collaborative Research: BPC-AE: The Alliance for the Advancement of African-American Researcher in Computing (A4RC)**, NSF, 01/01/2010 – 12/31/2011, \$1,492,281, AU Share: \$37,960.
15. Gilbert, J.E. & Seals, C.D. (PI), **Collaborative Proposal: BPC-DP: Incorporating Cultural Tools for Math and Computing Concepts**, NSF, 03/01/2009 – 2/29/2012, \$60,959.
16. Gilbert, J.E. (PI) & Seals, C.D., **NSF Collaborative Research: BPC-DP: African-American Researchers in Computing Sciences (AARCS)**, NSF, 12/1/2008 – 5/1/2010, \$199,952, AU Share: \$112,450.
17. Dahlberg, T. (PI-UNCC), Seals, C.D. (AU Coordinator), Gilbert, J.E. (Senior Personnel), et. al., NSF **BPC-A: The STARS Alliance: A Southeastern Partnership for Diverse Participation in Computing**, NSF, 3/1/2008 – 3/1/2011, \$2,000,000, AU Share: \$125,075.
18. Tripp, L.O., Seals, C.D, Davis-May, D., **AU Outreach Scholarship Grant 2008: Camp KEMET (Knowledge, Excellence in Mathematics Equilibrium and Technology)**, 5/2008 –5/2009, \$20,000.
19. Gilbert, J.E., Seals, C.D. (Co-PI, 20%) & Jackson, J. **Collaborative Research: BPC-DP: African-American Researchers in Computing Sciences (AARCS)**, NSF, \$341,311.
20. Eglash, R. (PI), Barnes, T., Seals, C. (AU Coordinator). **NSF BPC: Culturally Situated Design Tools**, NSF Leading Institution: Rensselaer Polytechnic. Total Amount: \$500,000, AU Subcontract: \$20,000.
21. Seals, C.D. NSF IPY: **International Polar Year: Community Ice Sheet Model**, NSF, 3/1/2007 – 3/1/2009, \$ 90,000.
22. Davis May, D., Seals, C.D, Thomas, C.M., Tripp, L.O., **AU Outreach Scholarship Grant 2006: Camp KEMET (Knowledge, Excellence in Mathematics Equilibrium and Technology)**, 5/2007 –5/2008, \$20,000.

23. Seals, C.D., Suh, L., **Auburn University Breeden Teaching Grant**, 5/2007 – 5/2008, \$1,000.
24. Gilbert, J.E. (PI), Seals, C.D., (Co-PI), Dozier, G.V. & Jackson, J.F.L., **NSF BPC-DP: African-American Researchers in Computing Sciences (AARCS)**, NSF, 3/1/2006 – 3/1/2009, \$409, 288, AU Share: \$318,473.
25. Dahlberg, T. (PI-UNCC), Seals, C.D. (AU Coordinator), Gilbert, J.E. (AU CoPI), **NSF BPC-A: The STARS Alliance: A Southeastern Partnership for Diverse Participation in Computing**, NSF, 3/1/2006 – 3/1/2009, \$2,000,000, AU Share: \$235,075.
26. Seals, C.D., Davis, D.J., et al. **Auburn University Breeden Teaching Grant**, 5/2006 – 5/2007, \$2,000.
27. Seals, C.D. **Auburn University Title IV Grant**, 5/2006 – 5/2007, \$20,000.
28. King-Jupiter, K.L. (PI), Davis May, D., Seals, C.D., Thomas, C.M., Tripp, L.O., **AU Outreach Scholarship Grant 2006: Camp KEMET (Knowledge, Excellence in Mathematics Equilibrium and Technology)**, 5/2006-5/2007, \$20,000.
29. Seals, C.D. **Auburn University Title IV Grant**, 5/2005 – 5/2006, \$10,000.
30. Seals, C.D. **Auburn University Title IV Grant**, 5/2004 – 5/2006, \$8,500.

#### **Fully Developed Extramural Grants (Submitted or In Process) & Under Construction: \$1.5M**

31. Seals, C., AU Principal (20%), " **AGEP FC-PAM: Faculty Advancement for African American STEM (FAAAS) Faculty at PWIs in the South**", NSF AGEP, Federal, AU \$1,579,643.

## **PUBLICATIONS**

**Thesis:** A Framework for Learning and Reuse in Visual Programming Environments: Supporting Novice Programmer Development of Educational Simulations (2004).

#### ***Committee:***

Dr. Mary Beth Rosson, Dept. of Computer Science, Virginia Polytechnic Institute & State University (advisor)  
 Dr. John Carroll, Depts. of Computer Science and Psychology, Virginia Polytechnic Institute & State University  
 Dr. Roger Ehrich, Dept. of Computer Science, Virginia Polytechnic Institute & State University  
 Dr. Rex Hartson, Dept. of Computer Science, Virginia Polytechnic Institute & State University  
 Dr. John Burton, Department Head, Education Teaching and Learning, Virginia Polytechnic Institute

#### **Patent (invention under review)**

1. Speights Atkins, M. Bailey, D. & Seals, C. (33%) (2022). The Automated Phonetic Transcription Grading Tool APTgt - AU Invention No. 2019-001 and working with AU marketing.

#### **Refereed Journals (\*student, N=31)**

1. Bailey, D. J., Speight Atkins, M., Mishra, I., Li, S., Luan, Y., Seals, C. (2021). An automated tool for comparing phonetic transcriptions, *Clinical Linguistics & Phonetics*, 20 pgs. Taylor & Francis Online <https://doi.org/10.1080/02699206.2021.1896783>, published 2/13/221
2. Liu, J., Speights, M., Bailey, D., Li, S., Luan, Y., Mishra, I., Cao, Y. & Seals, C. (2021). Optimization to Automated Phonetic Transcription Grading Tool (APTgt) – Automatic Exam Generator. *Learning and Collaboration Technologies: New Challenges and Learning Experiences. HCII 2021 Lecture Notes in Computer Science*, Vol 12784, 11pgs. Springer, Cham [https://link.springer.com/chapter/10.1007/978-3-030-77889-7\\_6](https://link.springer.com/chapter/10.1007/978-3-030-77889-7_6) published 7/3/2021.
3. Seals C.D., Li, Sicheng, Speights Atkins, M., Bailey, D., Liu, J, Cao, Y. Bassy, R. (2020) Applied Webservices Platform Supported Through Modified Edit Distance Algorithm: Automated Phonetic Transcription Grading Tool (APTgt). In: Zaphiris P., Ioannou A. (eds) *Learning and Collaboration*



*Technologies. Designing, Developing and Deploying Learning Experiences*. HCII 2020. Lecture Notes in Computer Science, vol 12205. 10 pages. Springer, Cham. [https://doi.org/10.1007/978-3-030-50513-4\\_29](https://doi.org/10.1007/978-3-030-50513-4_29)

4. Tripp, L.O., **Seals, C. D.**, Bassy, R.\* (2019). Design and Analysis of Advanced Learning Technology for Classroom Management. *Journal of Online Learning Research and Practice*. Vol 7, No 2, 2019. 15-37. Policy Studies Organization.
5. Nyagwencha, J.N., Seals, C.D. (2019). Universal Quadrant Model (UQM): Enhancing Usability of a Collaborative Cloud Tool for Sharing Best Practices Among Novice Users. In: (eds) *Design, User Experience and Usability. Application Domains*. HCII 2019. Lecture Notes in Computer Science, vol 11585. 10pages. Springer, Cham.
6. Speights Atkins, M., Seals, C., Bailey, D. J., (2019). At the intersection of applied sciences: Integrated learning models in computer science and software engineering and communication disorders. *Science Education and Civic Engagement: An International Journal*. Vol 11 No1, 37-43. SENCER. <http://new.seceij.net/articletype/winter-2019-from-the-editors/>.
7. **Seals, C.D.**, Asipade, A.\* Cao, Y.\* , Bassy, R.\* (2018). Java Zoo: A tool for interactive Java Instruction. IOSR Journal of Engineering and Innovation Trends in Computing and Communication (IJRITCC), 8pgs. Impact Factor: 5.837. ISSN: 2321-8169. May 2018.
8. **Seals, C.D.**, Tripp, L.O., Cao, Y.\* (2018). The Process of Developing Animated Cases as Pedagogy supporting Classroom Management Instruction. *International Journal of Education and Social Science (IJESS)*, Vol 5, No 4, 11-22. May 2018.
9. **Seals, C. D.**, Cao, Y.\* (2018). Online Educational System Security Improvement, IOR Journal of Engineering (IOSRJEN) Impact Factor: 4.027. April 2018.
10. Li, X., Shih, P. C., Li, X., & **Seals, C.** (2018). A Case Study of Novice Programmers on Parallel Programming Models. *Journal of Computers*, 13(5), 490-503.
11. **Seals, C. D.**, Tripp, L.O., Bassy, R.\* (2017). The Spectrum Educational Tool: Design and Development of eLearning Technology for Classroom Management *submitted May 2017* to IAFOR Journal of Education - Special Issue on "Technology in the Classroom, *accepted July* for publication September 2017.
12. Tripp, L.O., **Seals, C. D.** (2017). The Use of Animated Case Studies as a tool to Influence Pre-service Teacher Preparedness in Classroom Management. *International Journal of Education and Social Science*, Vol 4 No 3 March 2017.
13. Seals, C., Zhang, Q., Cook, T. (2017). An M-Learning Application to Enhance Children's Learning Experience, October 16 Vol. 4 No. 10, *International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC)*, ISSN: 2321-8169, PP: 214 – 222.
14. Li, X.\*, Shih, P-C., Overbey, J., **Seals, C.**, Lim, A. (2016). Comparing Programmer Productivity in OpenACC AND CUDA: An Empirical Investigation. *International Journal of Computer Science, Engineering and Application*. *International Journal of Computer Science, Engineering and Applications (IJCSEA)* Vol 6, No 5, October 2016.
15. **Seals, C.D.** Swanier, C.A.\* (2015). Changing the Face of Technology, *International Journal of Advanced Technology in Engineering and Science (IJATES)* Vol 03, No 11, November 2015.
16. **Seals, C. D.** Tripp, L.O. (2015). Multimedia applications to support classroom management. *Journal of Computer Science, Vol. 11, No. 10*, 2015.
17. Tripp, L. O., **Seals, C. D.** (2014). Spectrum Educational Applications supporting Classroom management. *Journal of K-12 School Technology, VOL. 7.NO.4* (p264-272).

18. **Seals, C. D.** Swanier, C., Nyagwencha, J. N.\*, Cagle, A.\*, Dawkins, S.\*, Houser, N.\* (2013) Developing New Mathematical Applications Utilizing Smart Table Access. *Journal of School Educational Technology*, Vol 7 No 4 (ISSN: 0973-2217, E-ISSN: 2230 – 7133), p24-32.
19. Davis, D.J., Davis-Maye, D., Thomas, C., **Seals, C.D.** (20%), Alfred, D.M., King-Jupiter, K., Tripp, L.O., Lovett, G.C. (2011). KEMET Academy: A University Outreach Model for Addressing the Wholeness of Learning in a Rural Context. *International Journal of Progressive Education*, Vol 7 No 1, pp. 6-27.
20. Jackson, J. F. L., Charleston, L. J., Gilbert, J. E., **Seals, C.** (2011). Changing Attitudes about Computing Science at Historically Black Colleges and Universities: Benefits of an Intervention Program Designed for Undergraduates. *Journal of African American Studies* (DOI 10.1007/s12111-011-9189-7), pp. 1-12. <http://www.springerlink.com/content/d0061vg235425026/>
21. Swanier, C., **Seals, C. D.**, Billionniere, E. (2009). Visual Programming: A Programming Tool for increasing mathematics achievement. *Journal of Educational Technology*, July 2009. Vol 5 No 2, pp. 1-5.
22. **Seals, C.D.**, Moses, W.\*, Martin, A., Nyagwencha, J.\*, Clanton, K. \*, Thomas, Chippewa M. & Doswell, F. (2008). Life Long Learning: Seniors in Second Life Continuum. *Journal of Computer Science* Vol. 4, No. 12, pp. 1064-1070, 2008.
23. **Seals, C.D.**,\* Rouse, K., \*McMillian, \*Y. Williams, A., Gilbert, J. and Chapman, R. Computer Gaming at Every Age: A Comparative Evaluation of Alice. *Journal of Educational Technology*, Vol 5 No 3, pp. 1-8.
24. **Seals, C. D.**, Hundley, J. & Strange, L. (2008). “Game Design & Development: Using computer games as creative and challenging assignments, *Journal of Educational Technology*, Vol 5 No 2, pp. 1-12.
25. \*Williams, A., \*Rouse, K., Seals, C.D., Gilbert, J.E. (2008). Enhancing Reading Literacy in Elementary Children using Programming for Scientific Simulations, *International Journal on E-Learning*, Vol 8 No 1, pp. 57-69.
26. **Seals, C.**, \*Clanton, K., \*Agarwal, R., Doswell, F. and Thomas, C. (2008). LifeLong Learning: Becoming Computer Savvy at a Later Age, *Journal of Educational Gerontology*.
27. Gilbert, J.E., \*Williams, A. **Seals, C.D.** (2007) Clustering for Usability Participant Selection, *Journal of Usability Studies*, Vol 3, No 1, pp. 41 – 53. [http://www.upassoc.org/upa\\_publications/jus/2007november/JUS\\_gilbert\\_nov2007.pdf](http://www.upassoc.org/upa_publications/jus/2007november/JUS_gilbert_nov2007.pdf)
28. Dozier, G., \*Cunningham, H., \*Britt, W., Wang, Y., **Seals, C.**, \*Zhang, F. (2006). Distributed Constraint Satisfaction, Restricted Recombination, and Genetic Protocols, *Journal of Applied Soft Computing*, Elsevier, Vol 7, No 3, pp. 1005-1011.
29. Dozier, G., Carnahan, B., **Seals, C.**, Kuntz, L.-A., Fu, S.-G. (2005). “Collaborative Design Using an Interactive Distributed Evolutionary Algorithm,” *The International Journal of Education and Information Technology*, September 2005, Vol 2, No 1, pp. 21-35.
30. Rosson, M. B., **Seals, C.** (2000). Learning and Reuse of a Visual Programming Language, IEEE, *Visual Languages Journal*. September 2000, pp. 85-93.
31. Kengeri, R, **Seals, C.**, Harley, H., Reddy, H., Fox, E.A. (1999). Usability study of digital libraries: ACM, IEEE-CS, NCSTRL, NDLTD. *International Journal of Digital Libraries*. August 24, 1999 2: 1-13.

#### **Refereed Conference Publications (\*student, N=62)**

Note: 62 conference papers published or accepted with 43 of these in Highly and Moderately Competitive Conferences indicated with + based on discipline, and Students are indicated with \*). N=53 since arriving at Auburn University with 41 HC-MC.

1. Liu, J., Seals, C., Li, S., Luan, Y., Mishra, I., Speights, M., Bailey, D. & Cao, Y. (2022). Optimization to Automated Phonetic Transcription Grading Tool (APT-GT). *Human Computer Interaction International – HCII 2022*, Sweden, pp12, HCII Springer. July 2022.
2. Liu, J., Seals, C., Ren, C, Luan, Y., Li, S., Xie, T., & Speights Atkins, M. (2022). Transformer-based Multilingual G2P Converter for E-Learning System. *Human Computer Interaction International – HCII 2022*, Sweden, pp10, HCII Springer. July 2022.
3. Xie, T. & Seals, C. D., Mobile augmented reality using deep learning for visually impaired people, *ACM SIGACCESS*, Accessibility and Computing, pp 6, ACM SIGACCESS  
<https://doi.org/10.1145/3523265.3523271>
4. Liu, J., Ren, C., Seals, C., Speights Atkins, M. (2022). Transformer based G2P system for phonetic transcription E-learning system. *Human Computer Interaction International – HCII 2022* July 2022.
5. Packer, S., Seals, C. & Dozier, G. (2022). Towards the Improvement of UI/UX of a Human-AI Adversarial Authorship System, *Human Computer Interaction International – HCII 2022*, Sweden, pp8, HCII 2022, July 2022.
6. Liu, J., Ren, C., Seals, C., Speights Atkins, M. (2022). MFCC based convolutional neural network speech disorders classification, *Human Computer Interaction International – HCII 2022* in Sweden/Virtual, pp8, HCII 2022, July 2022.
7. Sargsyan, N. & Seals, C. (2022). Using AR Headset Camera to Track Museum Visitor Attention: Initial Development Phase, *Human Computer Interaction International – HCII 2022*, Sweden/Virtual pp8.
8. Seals, C.D., Calderón, A.I., Ren, C., Baskiyar, S., Athikala, U., & Heck, K. (2021). Integration of Biological activity to Global Natural Product Social Molecular Networking: A Preliminary Study to support User Friendly Drug Discovery. *ASEE-SE 2021 American Society of engineering Education – Southeastern Section*. 8pgs. ASEE Virtual.
9. J Liu, M Speights, D Bailey, S Li, Y Luan, I Mishra, Y Cao, C Seals (2021). Optimization to Automated Phonetic Transcription Grading Tool (APTgt)–Automatic Exam Generator. *International Conference on Human-Computer Interaction (HCII)*, July 2021, 80-91, Springer, doi: 10.1007/978-3-030-77889-7\_6
10. Brown, B., Smith, M., Packer, S., Leslie, J., Seals, C., Dozier, G. & King, M. (2021). Adversarial UFP/UFN Attack Evolution. 2021 *IEEE Symposium Series on Computational Intelligence (SSCI)* 1-7, IEEE, doi: 10.1109/SSCI50451.2021.9659866.
11. J Liu, M Speights, D Bailey, S Li, H Zhou, Y Luan, T Xie, C Seals. (2021). Speech Disorders Classification in Phonetic Exams with MFCC and DTW. *IEEE 7th International Conference on Collaboration and Internet Computing (CIC)* 12/13/2021, 35-40, IEEE,  
<https://ieeexplore.ieee.org/abstract/document/9707175>
12. Seals C.D., et al. (2020) Applied Webservices Platform Supported Through Modified Edit Distance Algorithm: Automated Phonetic Transcription Grading Tool (APTgt). *Learning and Collaboration Technologies. Designing, Developing and Deploying Learning Experiences. HCII 2020*. Denmark pp. 380-398 (after conference selected as journal) [https://doi.org/10.1007/978-3-030-50513-4\\_29](https://doi.org/10.1007/978-3-030-50513-4_29) Springer.
13. S. Akula, N. Sargsyan, S. Korlapati, X. Wei, C. D. Seals and J. Kim, "Work-in-Progress—Utilizing Virtual Reality to Promote Active Learning in Construction Management," 2020 6th International Conference of the Immersive Learning Research Network (iLRN), San Luis Obispo, CA, USA, 2020, pp. 336-339, doi: 10.23919/iLRN47897.2020.9155208.
14. Li, S.\*, Speights Atkins, M., Bailey, D., Liu, J.\*, Cao, Y.\*, Bassy, R.\*, Seals, C.D. (2020). Interdisciplinary Research In Communications Sciences and Disorders and Software Engineering To Develop Online Phonetics Educational Training Modules, *American Society of Engineering Education ASEE-SE.org*, March 2020, Auburn, AL, 12 pages. <http://www.asee-se.org/proceedings/ASEE2020/papers2020/30.pdf>



15. Sargsyan, N.\*, Akula, S.\*, Bassy, R.\*, Liu, J.\*, Seals, C., Win, X.\*, White, J.J. (2019). Augmented Reality Applications to Enhance Training of Lumbar Puncture Procedure: Preliminary Results. Accepted for CAINE 2019 (International Conference on Computer Applications in Industry and Applications), San Diego, CA, October 2019.
16. +Speights-Atkins, M., **Seals, C.D.**, Bennett, A.\* & Cao, Y.\* (2019). Fostering Undergraduate and Graduate Interdisciplinary Research in Communication Sciences and Disorders and Software Engineering to Develop Online Phonetics Training Modules, SENCER Summer Institute August 2019. National Center for Science & Civic Engagement (*highly acknowledged in Education Scholarship*).
17. +Nyagwencha, J., **Seals, C.** (2019). Universal Quadrant Model (UQM): Enhancing Usability of a Collaborative Cloud Tool for Sharing Best Practices Among Novice Users. *HCII Conference 2019*. Orlando, Florida. www.hcii.org, 8pgs on CD.
18. +Speights-Atkins, M., **Seals, C.D.** & Bailey, D. (2018). The Automated Phonetic Transcription Grading Tool: Where Computer Science Meets Clinical Problem Solving in Communication Disorders, SENCER Summer Institute August 2018. National Center for Science & Civic Engagement (*highly acknowledged in Education Scholarship*).
19. +Tripp, L.O., **Seals, C.D.**, Thomas, M.\* (2018). Online Learning: Promoting Technology and Science Learning Experiences for Students Well Beyond the Classroom, The 22<sup>nd</sup> Annual Meeting & Learning Expedition Symposia: A World Science & Education Program, July 2018, 6pg. Killarney, Ireland (*highly acknowledged in Education Scholarship sponsored by NASA*).
20. +Tripp, L.O., Seals, C.D. (2018). Virtual Education: An Enhanced Alternative Learning and Practice Tool for Pre-service Teachers, The Society for Information Technology & Teacher Education, 6 pg. Washington, D.C., United States, March 26-30, 2018 (*highly acknowledged in Teacher Education*).
21. +Bailey, C. M., **Seals, C. D.** (2017). Evaluation of Web Usability Guidelines for Teens. ACM SE '17, ACM SE '17: Proceedings of the South East Conference, 8 pg. Atlanta, GA, April 2017.
22. X. Li\*, P-C. Shih, X-Q. Li, **Seals, C.** (2016). A Case Study of Novice Programmers on Parallel Programming Models. 9th International Conference on Computer and Electrical Engineering (ICCEE). December 7-11, 2016
23. +Swanier, C., **Seals, C.**, Bassy, R.\* (2016). Virtual Environments for Education: An Empirical Study of Implementing Education into 3D Video Games and Applications, EdMedia Conference 2016 on CD, 8 pg. Vancouver BC, June 2016.
24. Adams, C.\*, **Seals, C.** (2015). Course Builder: A Modularized Framework for Designing and Implementing Web-Based Learning Environments. 2015 *Emerging Researchers National (ERN) Conference in STEM* (6 pg.). Feb. 19- 21st, 2015, in Washington, D.C.
25. Smith, E. B. **Seals, C. D.**, Bernadin, S. (2015). Undergraduate students gaining knowledge through research projects, 6pgs. ASEE Southeast Regional Conference.
26. +Nyagwencha. J.N.\*, **Seals C.D.**, Cook, T., (2012). "Supporting Informal Learning Using a Cloud Tool: An Empirical Usability Study" EdMedia-World conference on Educational Media and technology, Denver Co, June 26-29 2012.
27. +Swanier, C., **Seals, C. D.** Nyagwencha. J.N.\*, (2012). Video Games: Who really plays them and how can they be used in education? EdMedia-World conference on Educational Media and technology, Denver Co, 6pgs. June 26-29 2012.
28. +**Seals, C.**, Swanier, C., Hull, E.\*, Thorpe, J., Dawkins, S., Nyagwencha, J.\* (2012). Implementing Education into 3D Video Game and Applications. 6pgs. *EdMedia 2012*. EdMedia-World conference on Educational Media and technology, Denver Co, June 26-29 2012.
29. +Adams, C.\*, **Seals, C. D.** (2012). Usability Research: A Preliminary Study of a Modularized Web-Based Learning Environment Framework. In Proceeding of the National Association for Developmental

Education 35<sup>th</sup> Annual Conference. Atlanta, GA, Feb23-26, 2012 (*highly acknowledged in Developmental Education*).

30. **Seals, C.**, Nyagwencha, J.\*, Bolton, A. (2011). Virtual Educational Communities Supported with Cloud Computing to Share Best Practices. *STARS Alliance Leadership Conference 2011*. Raleigh, NC: starsalliance.org. 6 pgs online proceedings Aug. 6 – 11, 2011.
31. Adams, C.\*, **Seals, C.** (2011). An Online Learning Tool: A Web-Based Environment to Support STEM Education. In Proceeding of the Annual STARS Celebration Conference. Raleigh, North Carolina, 6pgs online proceedings Aug. 6 – 11, 2011.
32. +Nyagwencha, J.\*, **Seals, C.** (2011). A Collaborative Tool for Communities of Practice to Share Best Practices. *HCII Conference 2011*. Orlando, Florida. [www.hcii.org](http://www.hcii.org), 8pgs on CD.
33. +Bolton, A.T., **Seals, C.D.** (2011). Social Networking and Culturally Situated Design Teaching Tools: Providing a Collaborative Environment for K-12, HCI International 2011, HCI International 2011, Orlando, FL, USA, July 9-14, 2011, Proceedings, Part IV. [www.hcii.org](http://www.hcii.org), 8 pgs on CD.
34. +Adams, C.\*, **Seals, C.** (2011). A Web-based Learning Environment to Support Chemistry. *HCII Conference 2011*. Orlando, Florida: 14th International Conference, HCI International 2011, Orlando, FL, USA, July 9-14, 2011, Proceedings, Part IV. [www.hcii.org](http://www.hcii.org), 8 pgs on CD.
35. **Seals, C.**, Nyagwencha, J.\*, Bolton, A.\* (2011). Cloud computing to support Effective Educational Communities in Virtual Learning Space. *ADMI conference proceedings*. Clemson, South Carolina. [www.admiusa.org](http://www.admiusa.org)
36. Nyagwencha, J.\*, **Seals, C.** (2011). Improving Senior's Computer Skills in SecondLife. *ADMI conference proceedings*. Clemson, South Carolina, 8pgs on CD-ROM [www.admiusa.org](http://www.admiusa.org).
37. Adams, C.\*, **Seals, C.** (2011). User Research of an Educational Web-Based Learning Environment: Preliminary Findings and Experiences. *ADMI conference proceedings*. Clemson, South Carolina 8pgs on CD-ROM [www.admiusa.org](http://www.admiusa.org)
38. **Seals, C.D.**, Nyagwencha, J. & Bolton, A. (2011). Cloud computing to support Effective Educational Communities in Virtual Learning Space, *ADMI conference proceedings*. Clemson, South Carolina. 8pgs on CD-ROM [www.admiusa.org](http://www.admiusa.org)
39. +Thomas, C. M., Tripp, L. O., **Seals, C. D.**, Brown, P. V., (2010). Virtual Education: An Enhanced Alternative Learning and Practice Tool for Pre-service Teachers and Counselors. Athens Institute for Education and Research, 8pgs. Athens, Greece.
40. Morris, S., Thomas, C., King, P., Lovett, G., **Seals, C.**, Tripp, L.O., and Davis-Maye, D. (2010). Intersections of Gender, Class, and Race: Black Women in the Academy. Diversity Research Initiative Conference 2010.
41. +Davis, D.J., Davis-Maye, D., Thomas, C., Alfred, D.M., King-Jupiter, K., **Seals, C.**, Tripp, L.O., & Lovett, G.C. (2009). KEMET Academy: A University Outreach Model for Addressing the Wholeness of Learning in a Rural Context. Proceedings of the American Institute of Higher Education Conference, Nashville, TN.
42. Bolton, A. T.\*, **Seals, C.**, Thomas, C. Clanton, K.\*, Agarwal, R.\* & Doswell, F. (2009). Seniors in Second Life. Tapia Celebration of Diversity in Computing. March 2009. 8pgs on CD-ROM. Portland Oregon.
43. **Seals, C.**, Agarwal, R., \*Rouse, K., \*Lindsey, R., \*Chilamantula, V., and Chapman, R. (2008). Computer Clubs Programs to Increase Computer Literacy, *ADMI conference*, 6pgs on CD-ROM, April 2008.
44. +Dahlberg, T., Barnes, T., Rorrer, A., **Seals, C.**, Lustria, M., and Hawkes L. (2008). The STARS Leadership Corps: Case studies in broadening participation in computing, *IEEE Frontiers in Education conference*, 8pgs. October 2008.

45. +**Seals, C.**, Game programming to bolster student motivation. (2008). *IEEE Frontiers in Education conference*, 8pgs. October 2008.
46. **Seals, C.**, \*Hundley, J., \*Strange, L. The Gaming Approach to Creative Educational Technology accepted to *EISTA 2008 International Conference on Education and Information Systems, Technologies and Applications*, on CD-ROM.
47. +Davis-Maye, D., **Seals, C.**, Thomas, C. M., Davis, D. J., Alfred, D, King-Jupiter, K., & Tripp, L.O. (2007). Celebrating the Textures of Rural America: Responding to Individuals and Families Throughout the Life Cycle. *32nd National Institute on Social Work and Human Services in Rural Areas Conference*, July 2007, Montgomery, AL.
48. **Seals, C.** and Tripp, L. (2007). "A Study of Science Teachers Utilizing Visual Programming Techniques", *International Multi-Conference on Society, Cybernetics and Informatics 2007*, July 2007, pp. 207-212.
49. +**Seals, C.D.**, \*Zhang, L. & Gilbert, J. (2006). Human Centered Computing Lab Web Site Redesign Effort. *In Proceedings of E-Learn 2006 World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education*, CD-ROM.
50. +\*Williams, A., **Seals, C.**, \*Rouse, K., & Gilbert, J. (2006). Visual Programming with Squeak SimBuilder: Techniques for E-Learning in the Creation of Science Frameworks. *In Proceedings of E-Learn 2006 World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education*, CD-ROM.
51. +**Seals, C.**, \*Mkpong-Ruffin, I., \*Germany, C. (2006). A Minimalist Approach To Object Oriented Programming Instruction. *In Proceedings of E-Learn 2006 World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education*, CD-ROM.
52. +**Seals, C.**, \*Gupta, P., \*Wilson, C. (2006). Evaluation of SimBuilder Squeak. *In Proceedings of E-Learn 2006 World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education*, CD-ROM.
53. **Seals, C. D.** (2005). Tapia05. Visual Programming for Novice Programmer Teachers, Tapia 2005 Celebration of Diversity in Computing.
54. +**Seals, C.D.**, Rosson, M.B., \*Walker, K. (2005). K-12 Teachers as Educational Simulation Developers: A Study of Reuse Programming for the Classroom. *Human Computer Interaction International HCII2005*, on CD-ROM.
55. +\*Strickland F., **Seals, C.D.** (2005). Using Elementary and Undergraduate Students to Compare 3D System with Minimalist Tutorials. *Human Computer Interaction International HCII2005*, on CD-ROM.
56. +Rosson, M. B., Carroll, J. M., **Seals, C. D.**, Lewis, T. L. (2002). Community Design of Community Simulations. *ACM Designing Interactive Systems DIS2002*, July 2002, London, pp. 75-83.
57. +**Seals, C. D.**, (2002). Learning and Reuse in Visual Programming Environments: Simulation Builder for Teachers. *ACM OOPSLA 2002*, November 2002, pp. 120-121.
58. **Seals, C. D.**, Rosson, M. B., Carroll, J. M., Lewis, T. L. (2002). Fun Learning StageCast Creator: An exercise in Minimalism and Collaboration. *IEEE Human Centric Computing Languages and Environments HCC02*, March 2002.
59. +Lewis, T. L., Rosson, M. B., Carroll, J. M., **Seals, C. D.** (2002). A Community Learns Design: Towards a Pattern Language for Novice Visual Programmers. *IEEE Human Centric Computing Languages and Environments HCC'02*, March 2002, p167-176.
60. +**Seals, C.** and Rosson, M. B. (2001). Learning and Reuse in Visual Programming Environments: Teacher Simulation Creation Environment. *IEE HCC '01 2001 IEEE Symposium on Human-Centric Computing Languages and Environments*, September 2001, pp. 177-186

61. +Rosson, M. B. and **Seals, C.** (2001). Teachers as Simulation Programmers: Minimalist Learning and Reuse. *ACM SIG CHI 2001*, April 2001, pp. 237-244.
62. Harley, H., **Seals, C.**, Rosson (1998). A formative evaluation of scenario-based tools for the learning Object-Oriented Design. *Crossroads: ACM Student Magazine*. Winter 1998, pp. 1-5.

### **Book Chapters**

63. Seals, C. D., Doswell, F., Swanier, C.A., Harris, L., Porter, J. & Maloney, D. (July 2022). Networking with New Scholars in STEM Fields. eds. Farmer, V & Shepherd-Wynn, E. *The Black Student's Pathway to Graduate Study and Beyond: The Making of a Scholar*, 21 pages (accepted 2021).
64. Doswell, F., Harley, H., Lewis, T., **Seals, C.**, and Dr. G. Scales. (2003). Adapting to Life as a Graduate Student: Getting Up to Speed on Information Technology, *Student's Guide to Graduate and Professional School Success*, edited by Farmer. V., p332-344.

### **Non-referred publications**

65. AUrora Repository Citation. Bailey, D. J., **Speights Atkins, M.**, Seals, C. D., Cao, Y., Li, S., Bennett, A., Liu, J., Liu, Y., & Mishra, I. (2020). *Automated Phonetic transcription comparison tool* [Computer software]. AUrora: Auburn University Scholarly Repository. <http://hdl.handle.net/11200/49809>.
66. Anderson, M., Gilbert, J., Jackson, J, Seals, C. Jones, E. (2019). NSF BPC-A: Institute for African-American Mentoring in Computing Sciences (iAAMCS) - Award Number: 145785, NSF Final Report. 20 pages. NSF.
67. NSF INCLUDES: Alabama Makerspace with Tuskegee University: NSF Annual Report 14 pages. NSF.

### **Published Interviews**

68. **Seals, C. D.** (2022). Auburn Professor Teaches Advanced Learning Technology to Homer Youth. The Guardian Journal, August 12, 2022 No.32 <https://theguardian-journal.com/ by Jacquelyn Tripp>
69. **Seals, C. D.** (2019). World of War Eagle Craft: Keepin' it realz with Cheryl Seals. Ginning Podcast. Samuel Ginn College of Engineering. <http://eng.auburn.edu/ginning/>
70. **Seals, C. D.** (2013). A4RC and discussion of challenges and successes in academia. <https://www.youtube.com/watch?v=h8SIbvCqQf0> from <http://www.a4rc.org> "Course Repository" tab.
71. **Seals, C. D.** (2010). A4RC and discussion on benefits of graduate education. Recorded at Tapia Celebration of Diversity in Computing 2009. <https://www.youtube.com/watch?v=CEbOJmIkNhA>
72. **Seals, C. D.** (2006). *NSF Grants to encourage Diversity Microsoft*, (March 2006) <https://www.mainfunction.com/patp/blog/archive/2006/03/09/489.aspx>
73. **Seals, C. D.** (2009). AAAS, Advancing Science Next Wave Science Magazine, Engineer's Corner by Clinton Parks <http://nextwave.sciencemag.org/cgi/content/full/2004/01/13/9>

### **Presentation with Published Video**

74. **Seals, C. D.** (2014). Artificial Intelligence - Cheryl D. Seals, Auburn University on Vimeo, *Kavli Frontiers of Science, Indonesian - American KFOS*, <https://vimeo.com/100872532> July 2014.

### **Invited Talks and Lectures (N=81)**

1. Wilson, N. Thomas, C. & **Seals, C.D.** (2021). Opioid User Recruitment during COVID-19: A Community Engaged Approach <https://engagementscholarship.org/meetings/past-conferences/esc-2021-meeting/program/schedule/concurrent-sessions-4>, September 2021. Engagement Scholarship

Conference.

2. **Seals, C.D.** (2021). Women in Computing, Workshop Presentation, July 2021, University of Alabama, Virtual
3. **Dozier, G.V. & Seals, C.D.** The future of Artificial Intelligence (AI) in Alabama Schools, Education Specialist, Career & Technical Education, Alabama State Department of Education ALACTE (Alabama Association for Career Technical Education) Virtual Summer Professional Development Conference, July 20, 2021, Virtual.
4. **Seals, C.D.** A Case for Diversity in Computing: How working with diverse teams fosters innovation <https://capwic.org/conferences/2021/schedule/> Keynote Presentation, March 2021, CAPWIC 2021, Capital City Women in Computing, Washington, D.C., Virtual.
5. **Seals, C.D.** (2021). Why Graduate School & Funding Your Graduate School Career <https://Admiusa.org/> Presentation, April 2021, ADMI 2021 Virtual.
6. **Seals, C.D.**, et al (2020). moderator conference chair Jamika Burge (2020). Intersectional and systemic inequities experiences of women in tech; computing & social justice; and steps we all can take toward accountability. Grace Hopper Celebration of Women in Computing. 2020, Invited. September 29, 2020.
7. **Seals, C. D.**, et al. (2020). AEP Sumer Excellence Program Department Chair Discussion, July 17, 2020. Invited.
8. **Seals, C. D.**, et al., (2020). AEP Diversity Faculty Panel March 1, 2020. Invited.
9. **Seals, C. D.** (2020). AEP STEM Visitation Day January 27, 2020. Invited.
10. Jones, E.V., **Seals, C.**, Swanier, C., Wiggins, U, Metoyer, R. (Presenter & Co-Author) (2019), Administrative vs. Research Career Paths in Academia, Panel, NSBC Conference, NSF, Atlanta, Georgia, "National Society of Blacks in Computing (NSBC.org)", Academic, National, Invited Speaker, Accepted. (August 2019). N=20.
11. **Seals, C.**, Johnson, A., Dillon, Edward (2019) (Presenter & Co-Author) (2019), Innovations in Computer Science Teaching. Workshop, NSBC Conference, NSF, Atlanta, Georgia, "National Society of Blacks in Computing (NSBC.org)", Academic, National, Invited Speaker, Accepted. (August 2019). N=18.
12. +Speights-Atkins, M., **Seals, C.D.**, Bennett, A.\* & Cao, Y.\* (2019). Fostering Undergraduate and Graduate Interdisciplinary Research in Communication Sciences and Disorders and Software Engineering to Develop Online Phonetics Training Modules, SENCER Summer Institute August 2019. National Center for Science & Civic Engagement. Accepted. Referred conference presentation).
13. Daley, S. Anderson, M. **Seals, C.D.** moderator Gray, J. NSF LEGACY project with high school girls. Virtual Panel. Invited. June 7, 2019. University of Alabama.
14. **Seals, C. D.** Why Graduate School? & How to Fund Your Graduate School Career. NSBC Conference, NSF, Atlanta, Georgia, "National Society of Blacks in Computing (NSBC.org)", Academic, National, Invited Speaker, Accepted. (August 2019). N=25.
15. **Seals, C.** (Presenter & Author), ADMI Symposium 2018: Computainment – admiusa.org, NSF, New Orleans, LA, "The Institute of African-American Mentoring in Computing Sciences (iAAMCS): A Program for Broadening Participation in Computing", Academic, National, Peer-Reviewed/Refereed. (April 5 – 8, 2018). N=50.
16. **Seals, C.** (Presenter & Author) (March 2018), Why Graduate School & Funding Your Graduate School Career? Spelman College, Atlanta, Georgia, Academic, Regional, Invited Speaker. (March 2018). N=20.
17. Speights, M., Bailey, D., **Seals, C.D.**, Bassy, R., Landrum, M., Li, G., Li, S., Burns, P., Cao, Y. (Jan 26, 2018. Improving Learning Outcomes in Phonetic Transcription Using Automated Software Tools. Conversations in Celebration of Teaching. Poster Presentation, Auburn University. N=30.
18. **Seals, C.** (Presenter & Author) (2017), Why Graduate School & Funding Your Graduate School Career?



- NSBC Conference, NSF, Atlanta, Georgia, "National Society of Blacks in Computing (NSBC.org)", Academic, National, Invited Speaker, Accepted. (June 2017). N=20.
19. **Seals, C.**, Jones, E., Daly, S. Gosha, K. & Metoyer, R. (2017) (Panel). What type of institution is right for you? The cultures, benefits, and drawbacks of different types of universities (R1, HBCUs, liberal arts). NSBC Conference, NSF, Atlanta, Georgia, "National Society of Blacks in Computing (NSBC.org)", Academic, National, Invited Speaker, Accepted. (June 2017). N=10.
  20. **Seals, C.** (Presenter & Author), (2017). ADMI Symposium: The Internet of Things – [admiusa.org](http://admiusa.org), NSF, Virginia Beach, VA, "African-American Researchers in Computing Sciences (iAAMCS): A Program for Broadening Participation in Computing", Academic, National, Peer-Reviewed/Refereed, Accepted. (March 23 - March 26, 2017). N=50.
  21. **Seals, C.** (Presenter & Author), (2016). "Institute of African-American Mentoring in Computing Sciences (iAAMCS): Why Graduate School?" Presentation at Clavin University for Distinguished Lecture Series. Invited Presentation. (October 2016). N=25.
  22. **Seals, C.** (Presenter & Author), (2016). STARS Celebration: Empowering 21st Century Tech Leaders, NSF, Charlotte, N.C. Georgia, "Institute of African-American Mentoring in Computing Sciences (iAAMCS): The benefits of graduate education." Academic, National, Peer-Reviewed/Refereed, Accepted Presentation. (August 2016). N=30.
  23. **Seals, C.** (Presenter & Author), (2016). STARS Celebration: Empowering 21st Century Tech Leaders, NSF, Charlotte, N.C. Georgia, "Advancing your career and increasing satisfaction for better Work/ Life Balance.", Academic, National, Peer-Reviewed/Refereed, Accepted Presentation. (August 2016). N=15.
  24. **Seals, C.** (Presenter & Author), (2016). NSBC Conference, NSF, Atlanta, Georgia, "National Society of Blacks in Computing (NSBC.org) ~ Inaugural Conference", Academic, National, Peer-Reviewed/Refereed, Accepted. (June 2016). N=35.
  25. **Seals, C.** (Presenter & Author), (2016). "Institute of African-American Mentoring in Computing Sciences (iAAMCS): Preserving Cultural Identity in Computer Science & Software Engineering" Presentation at Tuskegee University Invited Lunch Keynote for Research Day. Invited Presentation. (April 2016). N=90.
  26. **Seals, C.** (Presenter & Author), (2016). ADMI Symposium – [admiusa.org](http://admiusa.org), NSF, Winston Salem, NC. "African-American Researchers in Computing Sciences (iAAMCS): A Program for Broadening Participation in Computing", Academic, National, Peer-Reviewed/Refereed, Accepted. (March 31-Apr 3, 2016). N=50.
  27. **Seals, C.** (Presenter & Author), (2015). ADMI Symposium, NSF BPC, Atlanta, Georgia, "African-American Researchers in Computing Sciences (iAAMCS): A Program for Broadening Participation in Computing, Institute of African American Mentoring in Computer Science", Academic, National, Peer-Reviewed/Refereed, Accepted. (March 2015).
  28. **Seals, C.** (Presenter Only), (2014). Columbus State University October 2014, NSF STARS Alliance.org, Columbus, Georgia, "Why research? The Benefits of Ph.D. and service learning", Academic, Regional, Invited. (October 2014).
  29. **Seals, C.** (Presenter & Author), (2014). National Academy of Science. National Academy of Science meeting in Medan-North Sumatra, Indonesia. Academic, National, Peer-Reviewed/Refereed, Accepted. (June 2014).
  30. **Seals, C.** (Presenter & Author), (2014), ADMI Symposium, NSF BPC, Hampton, Virginia, "African-American Researchers in Computing Sciences (iAAMCS): A Program for Broadening Participation in Computing, Institute of African American Mentoring in Computer Science", Academic, National, Peer-Reviewed/Refereed, Accepted. (April 2014).

31. **Seals, C.** (Presenter Only), (2013), Spelman College Geek Week 2013, NSF CE21 Institute for African Americans in Computing Sciences, Spelman College, Atlanta, Georgia, "Why research and the Benefits of obtaining the Ph.D. early in your career", Academic, Regional, Invited. (October 2013).
32. **Seals, C.** (Presenter Only), (2013), Georgia Gwinnett College, September 2013, NSF CE21 Institute for African Americans in Computing Sciences. "Benefits of obtaining the Ph.D. early in your career", Academic, Regional, Invited. (September, 2013).
33. **Seals, C.** (Presenter & Author), (2013). ADMI Symposium, NSF BPC, Hampton, Virginia, "African-American Researchers in Computing Sciences (A4RC): A Program for Broadening Participation in Computing", Academic, National, Peer-Reviewed/Refereed, Accepted. (April 2013).
34. **Seals, C.** (Presenter Only), (2012). Spelman College Geek Week 2012, NSF CE21 Institute for African Americans in Computing Sciences, Spelman College, Atlanta, Georgia, "Benefits of obtaining the Ph.D. early in your career", Academic, Regional, Invited. (October 2012).
35. Nyagwencha, J.N., **Seals C.D.**, Cook, T. (2013). "Supporting Informal Learning Using a Cloud Tool: An Empirical Usability Study" EdMedia-World conference on Educational Media and technology, Denver Co, June 26-29 2012. (presentation)
36. **Seals, C.** (Presenter & Author), (2012). ADMI Symposium, NSF, Howard University, Washington, D.C., "African-American Researchers in Computing Sciences (A4RC): A Program for Broadening Participation in Computing", Academic, National, Peer-Reviewed/Refereed, Accepted. (April 2012).
37. Nyagwencha, J., **Seals C. D.**, Cook, T. (2012). Educational Communities Supported Within a Cloud, *Auburn University Research Week 2012*. (presentation)
38. **Seals, C.** (Presenter & Author), (2011). Fort Valley State University Research Day, NSF/CRA, Fort Valley State University, Fort Valley, Georgia, "African-American Researchers in Computing Sciences (A4RC): A Program for Broadening Participation in Computing", Academic, National, Peer-Reviewed/Refereed, Invited. (November 2011).
39. **Seals, C.** (Presenter & Author), (2011). Grambling State University Research & Recruiting, NSF, Grambling State University, Grambling, Louisiana, "African-American Researchers in Computing Sciences (A4RC): A Program for Broadening Participation in Computing", Academic, National, Peer-Reviewed/Refereed, Invited. (October 2011).
40. **Seals, C.** (Presenter Only), (2011). Spelman College Geek Week 2011, NSF BPC, Spelman College, Atlanta, Georgia, "Benefits of obtaining the Ph.D. early in your career", Academic, Regional, Invited. (October 2011).
41. **Seals, C.** (Presenter & Author), (2011). Spelman College Research & Recruiting, NSF, Spelman College, Atlanta, Georgia, "African-American Researchers in Computing Sciences (A4RC): A Program for Broadening Participation in Computing", Academic, National, Invited. (October 2011).
42. **Seals, C.** (Presenter & Author), (2011). STARS Celebration of Leadership, NSF, Raleigh, North Carolina, "Why Graduate School?", Academic, National, Peer-Reviewed/Refereed, Accepted. (August 2011).
43. **Seals, C.** (Presenter & Author 2011), ADMI Symposium, NSF, Clemson University, South Carolina, "African-American Researchers in Computing Sciences (A4RC): A Program for Broadening Participation in Computing", Academic, National, Peer-Reviewed/Refereed, Accepted. (April 2011).
44. Adams, C., **Seals, C.** (2011). A Web-Based Learning Environment to Support STEM Education. ADMI conference, on CD-ROM, April 2011.
45. (Accepted) Invited Talk  
**Seals, C.D.**, (April 9, 2010). Alliance for the Advancement of African-American Researchers in Computing (A4RC): A Program for Broadening Participation in Computing, 2009 ADMI Symposium, Morgan State University. April 2009.

46. Invited Talk  
**Seals, C.D.** (April 1, 2010). Alliance for the Advancement of African-American Researchers in Computing (A4RC): A Program for Broadening Participation in Computing, 2009 ADMI Symposium, Morgan State University. April 2009.
47. Presentation (invited)  
**Seals, C.D.**, (2010). Alliance for the Advancement of African-American Researchers in Computing (A4RC): A Program for Broadening Participation in Computing, FAMU, Tallahassee, Florida, Feb. 4, 2010.
48. Presentation (invited)  
**Seals, C.D.**, (2010). Alliance for the Advancement of African-American Researchers in Computing (A4RC): A Program for Broadening Participation in Computing, Fort Valley State University, Fort Valley, Georgia, Feb. 5, 2010.
49. Presentation (invited)  
**Seals, C.D.**, (2010). Human Computer Interaction Research, Fort Valley State University, Fort Valley, Georgia, Feb. 5, 2010.
50. Presentation (invited)  
**Seals, C.D.**, (2010). Alliance for the Advancement of African-American Researchers in Computing (A4RC): A Program for Broadening Participation in Computing, University of Arkansas, Pine Bluff, Arkansas, Feb. 26, 2010.
51. Presentation (invited)  
**Seals, C.D.**, (2009). African-American Researchers in Computing Sciences (AARCS): A Program for Broadening Participation in Computing. STARS Celebration of Leadership, Florida State University, Tallahassee, Florida, August 2009.
52. Presentation (invited)  
Davis, D.J., Davis-Maye, D., Thomas, C., Alfred, D.M., King-Jupiter, K., **Seals, C.**, Tripp, L.O., & Lovett, G.C. (2009). KEMET Academy: A University Outreach Model for Addressing the Wholeness of Learning in a Rural Context. The American Institute of Higher Education Conference, Nashville, TN. April 29, 2009.
53. Invited Talk  
**Seals, C.D.**, (2009). African-American Researchers in Computing Sciences (AARCS): A Program for Broadening Participation in Computing, 2009 ADMI Symposium, Morgan State University. April 2009.
54. Invited Talk  
**Seals, C.D.**, (2008). Strategies for Successful Graduate Student Life, Workshop for BGSA, Auburn University Chapter Meeting, Auburn, Alabama, February 25, 2009.
55. Presentation  
**Seals, C.D.**, (2008). Introduction to Human Computer Interaction, TSYS Department Colloquium Series Lecture, Columbus State University, Columbus Georgia. December 9, 2008.
56. Invited Talk  
**Seals, C.D.**, (2008). Strategies for Successful College Student Life, Provost Leadership Undergraduate Scholarship (PLUS) Program, Auburn, October 16, 2008.
57. Invited Talk  
**Seals, C.D.**, User Interface Design and Game Design Research, Future Science Engineering and Mathematics Faculty (FSEM) Auburn, October 15, 2008.
58. **Seals, C.D.**, (2008). Game Design Research and the STARS Alliance, Graduate School Day, Spelman College, September, 2008.
59. Presentation

- Seals, C.D.**, (2008). African-American Researchers in Computing Sciences (AARCS): A Program for Broadening Participation in Computing. STARS Celebration of Leadership, Auburn, AL. August 2008.
60. Presentation
- Seals, C.D.**, & Lawrence, A., (2008). The CookBook Approach to Computer Science Outreach. STARS Celebration of Leadership, Auburn, AL. August 2008.
61. Presentation
- Seals, C.D.**, (2008). African-American Researchers in Computing Sciences (AARCS): A Program for Broadening Participation in Computing. STARS Celebration of Leadership, Auburn, AL. August 2008.
62. Invited Talk
- Seals, C.D.**, (2008). African-American Researchers in Computing Sciences (AARCS): A Program for Broadening Participation in Computing, 2008 ADMI Symposium, Hampton, VA. April 2008.
63. Panel
- Barnes, T., Lustria, M., Dahlberg, **Seals, C.**, & Lawrence A. (2008). STARS Alliance, Special Interest Group for Computer Science Education (SIGCSE) 2008.
64. Invited Talk
- Seals, C.D.**, (2007). Game Design Research and the STARS Alliance, Computer Sciences Seminar Series, Georgia Southern University, November, 2007.
65. Invited Talk
- Seals, C.D.**, (2007). African-American Researchers in Computing Sciences (AARCS): A Program for Broadening Participation in Computing, Future Science Engineering and Mathematics Faculty (FSEM), Auburn University, October 2007.
66. Panel
- Barnes, T., Lustria, M. & **Seals, C.**, (2008). STARS Alliance, Grace Hopper Celebration of Women in Computing, Orlando, Florida, October, 2007.
67. Presentation
- Seals, C.D.** (2007). African-American Researchers in Computing Sciences (AARCS): A Program for Broadening Participation in Computing. STARS Celebration of Leadership, Charlotte, NC. August 2007.
68. Invited Talk
- Seals, C.D.** (2007). African-American Researchers in Computing Sciences (AARCS): Broadening Participation in Computing: Graduate School and the Professoriate, CIS COLLOQUIUM Florida A&M University, Florida, March 14, 2007.
69. Invited Talk
- Seals, C.D.** (2007). Strategies for Successful Graduate Student Life, Workshop for Societas Docta, Inc., Montgomery-Tuskegee Chapter Mentee Meeting, Auburn, Alabama, February 25, 2007.
70. Invited Talk
- Seals, C.D.** (2007). African-American Researchers in Computing Sciences (AARCS): Broadening Participation in Computing: Graduate School and the Professoriate, 2007 ADMI Symposium Florida Atlanta, Georgia, Feb, 2007.
71. Gilbert, J.E., **Seals, C.D.** (2007). Recruiting at Spelman College, February 2007.
72. Invited Talk
- Seals, C. D.**, (2006). Introduction to Computer Science & User Interface Design, Lagrange High School, Lagrange, Georgia, June 5, 2006.
73. Invited Talk

- Seals, C.D.** (2006). Introduction to User Interface Design & User Interface Issues, World Usability Day, Auburn University, Auburn, AL, November 3, 2006.
74. **Seals, C.D.** (2005). Gilbert, J.E., Introduction to User Interface Design, World Usability Day, Auburn University, Auburn, AL, November 3, 2005.
75. Technical Paper CSSE04-09 (2004): Gerry Dozier, Brian Carnahan, **Cheryl Seals**, Lois-Ann Kuntz, and Ser-Geon Fu, *An IDEA for Design*, July 30, 2004.
76. **Seals, C.D. (2002)**. Supporting Educational Software Reuse: Teacher Simulation Builder for Teachers. Research presentation at SIGCSE 2002 Doctoral Consortium (February).
77. **Seals, C.D.** (2002). AWC Faculty and Graduate Student **Panel on Academic Careers** - Panel Member - February 2002
78. **Seals, C.D.** (2001). Presentation at Engineering Expo - Intro to Computing Careers - October 2001
79. **Seals, C.D.** (2001). Computer Science Graduate Student Expo - Panel Member - October, 2001
80. **Seals, C.D.** (2001). Supporting Educational Software Reuse: Teacher Simulation Creation Environment. Research presentation at SIGCSE 2001 Doctoral Consortium (February).  
<http://www.grinnell.edu/sigcse/sigcse2001/program.html>
81. **Seals, C.D.** (2000) Formative Evaluation of Visual Programming Environments for Teacher Creation of Educational Simulations. Research presentation made at SIGCSE 2000 Doctoral Consortium.

**Exhibitions (listed N=21, listing does not include 3 summer camps each year for over 14 years (63 exhibitions = 21 listed + 42 not listed).**

1. Cook, T & **Seals, C.D.** et al., (March 2020). Robotic and Drone Computing Challenges with 4H, Extension and CSSE. 4H STEM Expo 2020 in Russellville Alabama. NSF supported event N=100.
2. **Seals, C.D.** et al., (October 2019). AR/VR Engineering Grand Challenges with Auburn Engineering Outreach. N=200.
3. **Seals, C.D.** et al., (October 2018). AR/VR Engineering Grand Challenges with Auburn Engineering Outreach. N=150.
4. Lovelace, C., Qin, X., & **Seals, C.D.** (February 2018). EDay Gaming Exhibition. Computer Gaming exhibitions for recruiting at Auburn EDay.
5. **Seals, C.D.** (October 2017). AJHS E-Day Gaming Exhibition. Computer Gaming exhibitions for recruiting at Auburn Junior High School E-Day.
6. Qin, X., **Seals, C.D.** (February 2017). EDay Gaming Exhibition. Computer Gaming exhibitions for recruiting at Auburn EDay.
7. **Seals, C.D.**, (October 2016). AJHS E-Day Gaming Exhibition. Computer Gaming exhibitions for recruiting at Auburn Junior High School E-Day.
8. **Seals, C.D.**, (March 2016). Gunther Air Force Day – Bring your children to work – why engineering & Computer Gaming exhibitions for recruiting at Gunther Air Force Base (Audience K-12).
9. **Seals, C.D.**, Qin, X. (February 2016). EDay Gaming Exhibition. Computer Gaming exhibitions for recruiting at Auburn EDay.
10. **Seals, C.D.**, (October 2015). AJHS E-Day Gaming Exhibition. Computer Gaming exhibitions for recruiting at Auburn Junior High School E-Day.
11. **Seals, C.D.**, Qin, X. (February 2015). EDay Gaming Exhibition. Computer Gaming exhibitions for recruiting at Auburn EDay.



12. **Seals, C.D.**, (October 2014). Drake Middle School E-Day Gaming Exhibition. Computer Gaming exhibitions for recruiting at Drake Middle School E-Day.
13. **Seals, C.D.**, (November 2014). Wrights Mill Road Elementary School E-Day, Why Engineering & Computer Gaming exhibitions for professional day at WMR Elementary School Professional Day.
14. Qin, X., **Seals, C.D.**, (February 2012-2014). EDay Gaming Exhibition. Computer Gaming exhibitions for recruiting at Auburn EDay 2012, 2013 & 2014.
15. **Seals, C.D.**, (October 2013). Drake Middle School E-Day Gaming Exhibition. Computer Gaming exhibitions for recruiting at Drake Middle School E-Day.
16. **Seals, C.D.**, Biaz, S. (February 201-2014). EDay Gaming Exhibition. Computer Gaming exhibitions for recruiting at Auburn EDay 2011, 2012.
17. **Seals, C.D.** (February 2009). EDay Gaming Exhibition. Computer Gaming exhibitions for recruiting at Auburn EDay 2009.
18. **Seals, C.D.**, Chapman, R., Carlisle, W.H., & Gilbert, J.E. (May, 2008). Alice EDay Exhibition. Local Alice computer camp winners exhibited their works at Auburn EDay 2008.
19. **Seals, C. D.** & Lindsey, R. (March, 2008). ACMSE Digital Animation Festival. Top 8 students from our area computer camps presented their Digital animations in Alice 3D at ACMSE Poster Session.
20. **Seals, C. D.** & Lindsey, R. (Feb, 2008). Alice Film Festival Competition. We brought the top 10 students from our area computer camps to UAB for the Alice film festival and won 4 of the top 7 places in our category.
21. **Seals, C.D.**, Chapman, R., & Gilbert, J.E. (2007). Alice EDay Exhibition. Local Alice computer camp students exhibited their works at Auburn EDay 2007.

#### **Honors and Awards (N=18)**

1. Drexel ELATES STEM Fellowship 2022-2023
2. Charles Barkley Endowed Professor 2020-2025
3. Mentor of the Year 2019-2020 presented by Alabama Power Academic Excellence Program – May 2020
4. The Living Legend Award presented by The National Society of Black Engineers – April 2019
5. The Social Humanitarian Award presented by The National Society of Black Engineers – March 2017
6. The AEP Above and Beyond Award 2016-2017 – May 2017
7. Leadership in Faculty Award; 100 Women Strong, April 2016
8. Graduate Mentoring Award – The Compact for Faculty Diversity, November 2015
9. Invitation – Organize & Lead Session National Academy of Science Computing Research, June 2015
10. Invitation to Present - National Academy of Science Computing AI Research, June 2014
11. Featured Researcher (2009). Research Initiative for the Study of Diversity at Auburn University February 2009. <https://fp.auburn.edu/researchdiversity/CherylSeals.aspx>
12. Invitation National Academy of Science to share candidates research, October 2005
13. User Interface Design Class Placed as 2<sup>nd</sup> Runner-up, National Competition, Fall 2004, Addison Wesley Designing the User Interface 2004
14. Upsilon Pi Epsilon, Computer Science Honor Society
15. Virginia Commonwealth and Kellogg Fellowships
16. Kappa Delta Pi, Education Honor Society
17. Concert Mistress, Grambling Laboratory Orchestra
18. Academic Merit, T.H. Harris, and Orchestra Scholarships

## EXPERIENCE

### **Associate Professor Computer Science**

Auburn University, Auburn Alabama

2010-present

Areas of research: Human Centered Computing, Game Design, Mobile Applications, User Interface Design, Cloud Computing

### **Acting Director – Alabama Power Academic Excellence Program**

Auburn University, Auburn Alabama

May 2014 - Jan 2016

Administrative: Student Support & Development, University Fundraising & Fund Portfolio Development

### **Assistant Professor Computer Science**

Auburn University, Auburn Alabama

2004-2010

Areas of research: Human Computer Interaction, Intelligent and Interactive Systems, User Interface Design, OOA&D, Software Design, Development, Verification & Validation.

### **Instructor Computer Science**

Auburn University, Auburn Alabama

2003-2004

Areas of Teaching: Human Computer Interaction, Artificial Intelligence and Intelligent and Interactive Systems,

### **Graduate Research Assistant (Usability Engineer)**

Virginia Tech, Blacksburg, VA

1995-2003

Software/Usability Engineering of visual programming environment to support novice programmer development of educational simulations (2000-present). Usability Analysis of MyInBox Voice e-mail System (1999). Usability Analysis of Digital Libraries (1997-1999), Usability Analysis of Visual Programming Environments (1998-present). Usability Analysis of Scenario Based Tools for Learning Object-Oriented Design (1997).

### **Graduate Teaching Assistant: CS1004/1104 Computer Literacy**

Virginia Tech, Blacksburg, VA

1/2000 – 1/2001

Graduate Teaching Assistant: Aided in Preparation of exams, management of online testing system, and lab assistant.

### **Computer Literacy and Programming Instructor**

Upward Bound Summer Program, Blacksburg, VA

1997-2002

Instructor: Prepared lecture, assignments, exams and delivered computer literacy and programming instruction to Upward Bound High School Summer Students. Topics covered: MS Office proficiency, programming concepts and Web page design and programming.

### **Graduate Teaching Assistant: CS1044 Introduction to Programming in C**

Virginia Tech, Blacksburg, VA

8/95-1999

Graded programs in C. Lab monitor and aided students in learning programming concepts.

**Application Integrator**

IBM (Integrated Services and Solutions Corporation), Atlanta, GA

Health Industry Commercial Contracts - Created proposals and prototypes for health industry contracts as an Object Oriented advisor and Application Integrator. Developer/tester of Health industry interfaces.

**Summer Intern**

Polaroid Corporation, Boston, MA

6/94-8/94

Film Imaging Research and Development - Developed a data acquisition application for the Hunter Colorimeter using C Programming and Sapiens SmartStar (Booch, Yourdon, and Fusion Methods)

**Database Administrator/System Tester**

Bell Communications Research, Piscataway, NJ

1990 - 1992

Member Technical Staff

- Coordinated, executed, and documented the transition of databases from a UNIX to an IBM MVS/IMS environment.
- Increases the efficiency of Product Test Group by saving versions of test scenarios with an automated testing facility.
- Tested UIs, developed automated regression test package to maximize quality and scope of Testing.

**Consulting (N=30)**

1. Spring 2021 – Present, Department of Navy Outreach with Dr. Ed Davis & Dr. Joni Lakin
2. Spring/Fall 2021 – Department of Building Science with Prof. Jeff Kim
3. Fall 2021 – Department of Pharmacy, AR/VR supporting Pharmacy and Rheumatoid Arthritis  
Dr. Kimberly Garza (Pharmacy), Dr. Chris Ross (Mechanical Eng)
4. Spring 2021 – Present, Young Professionals in Training – Auburn University Outreach
5. Fall 2019 – Spring 2022, Culture Bump with Auburn Outreach mobile app design and development.
6. Fall 2019 – present, Becoming the Beloved Community/College of Liberal Arts web design and development.
7. Fall 2018 – Fall 2021, AR/VR and Advanced Learning Technologies supporting Building Sciences.
8. Spring 2017 – Spring 2021, Advanced Learning Technologies with VCOM physician assistive technology  
Dr. White & Dr. Nordehn.
9. Fall 2016-present, Advanced Learning Technologies with Communications & Linguistics Auburn (Dr. Speights & Dr. Bailey). Team development of linguistics teaching tool.
10. Fall 2016-present, Logan Project with AUM, Math for the students with low/no visual acuity.
11. 2015-Present Supporting Industrial & Systems Engineering in Advanced Learning Technology for ISE  
Dr. Sese, Dr. Thomas & Dr. Schall
12. 2014-Present Supporting Teacher Education in Advanced learning Technology for Classroom Management, Dr. Tripp (Spectrum Education).
13. 2010-present Extension and Tony Cook, For Youth For Life supporting youth learning of science.
14. 2007-2010, NSF Grant Consultant for Culturally Situated Design Tools with Rensselaer Polytechnic Institute
15. 2007, Consultant to Danya International Inc. (NIH Grant Writing)
16. 2007, Consultant to REMTECH, Inc. contact Gene Fuller (Industrial Advisory Board) and grant collaboration NSF ITEST/NSF ROLE
17. 2007, User Interface Design to Mt. Olive Missionary Baptist Church

18. 2007, User Interface Design Consultant to Information Lab
19. 2007, User Interface Design Consultant to Auburn Korean Church
20. Fall 2006, Southern Polytechnic State University, LSAMP Program
21. 2006, Consultant to REMTECH, Inc. contact Gene Fuller (Industrial Advisory Board) and grant collaboration
22. 2006, Consultant to Danya International Inc. (Usability Testing)
23. 2006, Consultant to T.E.A.C.H., Inc. and grant collaboration
24. Fall 2005, User Interface Design Consultant to Impact Center
25. Fall 2005, Consultant to REMTECH, Inc. contact Gene Fuller (IAB)
26. Fall 2005, Achievement Center Consultant in Web Redesign
27. Fall 2005, Fitness Solutions Consultant in Web Redesign
28. 2005 Consultant to Prophecy 3D, LLC
29. Fall 2004, Socaz Painting Consultant in Web Redesign
30. 2004, Consultant to Prophecy 3D, LLC

## **PROFESSIONAL DEVELOPMENT ACTIVITIES (N=35)**

1. Adobe Creative Cloud Faculty Workshop, June 2020
2. Hybrid Course (Re)Design Workshop, June 2019
3. Hybrid Course (Re)Design Workshop, June 2018
4. Reviewer – Journal of Artificial Intelligence 2012-2015
5. STEM Women of Color Conclave 2010-2018, NSF funded Professional and Leadership development
6. Reviewer November 2009-2015, 2019-2020, Poster & Paper Reviewer Tapia Conference
7. Reviewer SIGCSE Conference 2009, 2010, 2014
8. Reviewer - NSF Proposal Review Panels 2006, 2009-2018 (annually)
9. Mar 2008, Session Chair ACMSE
10. Feb 2008, Reviewer ACMSE Papers
11. Jan 2008, Reviewer EISTA Conference 2008
12. Oct 2007, Judge Student Posters Grace Hopper Conference 2007
13. Summer 2007, Served on 2 NSF Proposal Panels
14. Mar 2007, Judge –Alabama ALSAMP Scholars/BD Conference 2007
15. Feb 2007, Judge – Computer Science Olympiad - Programming Contest
16. 2007-2008, Sisters of the Academy Executive Committee
17. Dec 2006, Judge –South's BEST Robotics Competition 2006
18. Oct 2006, Grace Hopper Conference 2006 Student Posters Co-Chair
19. Summer 2006, Served on 2 NSF Proposal Panels
20. Mar 2006, Judge –Alabama ALSAMP Scholars/BD Conference 2006
21. Oct 2005, AU SWE Chapter National conference chaperone
22. Summer 2005, Served on 2 NSF Proposal Panels
23. Feb 2005, Judge –Alabama ALSAMP Scholars/BD Conference 2005
24. Feb 2004, Judge –Alabama ALSAMP Scholars/BD Conference 2004
25. Oct 2004, Judge –South's BEST Robotics Competition 2004
26. Feb 2003, Judge -Undergraduate Science and Engineering Conference 2003
27. Feb 2002, Judge -Undergraduate Science and Engineering Conference 2002
28. ACM International Student Poster Competition - Reviewer - February, 2001, 2002
29. AWC (Assoc. for Women in Computing) Panel on Academic Careers - Panel Member - February, 2002 Member AWC "Association for Women in Computing" - Presentation at Girl's Day 2000, 2001, 2002.

30. Computer Science Graduate Student Expo - Panel Member - October, 2001
31. Officer Computer Science Graduate Council 3 years, Treasurer, Social Chair, Member of Dept. Computer Resources Consortium, Member of Dept. Recognition and Awards Committee.
32. Secretary - Delta Sigma Theta Sorority, Inc. Blacksburg Alumnae Chapter
33. Secretary - Virginia Tech BGSO "Black Graduate Student Organization"
34. President, Eta Zeta Chapter Sigma Alpha Iota International Music Fraternity (Grambling State)
35. Drill Sergeant, Section Leader, Grambling Tiger Marching Band (Grambling State)

## **Service**

### **Outreach service (N=48 courses not including distance research courses 8996)**

1. CPCS 5200-A02 (outreach course), Developing Web Apps w/XML, Fall 2021, N=22
2. CPCS 4970-A02 (outreach course), User Interface Design, Fall 2021, N=19
3. CPCS 4970-A01 (outreach course), Game Design & Development, Fall 2021, N=18
4. CPCS 5210-A01 (outreach course), Web App Development 2 w/JSP, Fall 2021, N=29
5. CPCS 5203-A02 (outreach course), Developing Web Apps w/XML, Summer 2021, N=26
6. CPCS 4970-A01 (outreach course), Game Design & Development, Summer 2021, N=9
7. CPCS 5210-A02 (outreach course), Developing Web Apps w/XML, Spring 2021, N=25
8. CPCS 5210-A01 (outreach course), Web App Development 2 w/JSP, Spring 2021, N=22
9. CPCS 5200-A01 (outreach course), Developing Web Apps w/XML, Spring 2021, N=24
10. CPCS 5203-A02 (outreach course), Developing Web Apps w/XML, Fall 2020, N=33
11. CPCS 5213-A01 (outreach course), Web App Development 2 w/JSP, Fall 2020, N=26
12. CPCS 5203-A01 (outreach course), Developing Web Apps w/XML, Summer 2020, N=19
13. CPCS 5203-A01 (outreach course), Developing Web Apps w/XML, Spring 2020, N=35
14. CPCS 5213-A02 (outreach course), Web App Development 2 w/JSP, Spring 2020, N=32
15. CPCS 5203-A01 (outreach course), Developing Web Apps w/XML, Spring 2020, N=35
16. CPCS 5203-A02 (outreach course), Developing Web Apps w/XML, Fall 2019, N=32
17. CPCS 5213-A01 (outreach course), Web App Development 2 w/JSP, Fall 2019, N=13
18. CPCS 5203-A01 (outreach course), Developing Web Apps w/XML, SUM 2019, N=15
19. COMP 6626 (outreach), User Interface Design, annually **F2008-F2022 [14 classes taught]**
20. COMP 6976 (outreach), Game Design & Development **S2014-S2022 [8 classes taught]**
21. COMP 7626 (outreach), Human Computer Interaction **S2008-2013; S2021-2022 [8 classes taught]**

### **Professional Service (N=37)**

1. Sept 2014-2018, Board of Advisors, North Carolina A&T State University, Computer Science Dept., Greensboro, NC, USA
2. 2013-2015 SIGCSE Program Committee, SIGCSE Kids Camps
3. 2013-2015 CRA-W/CDC Distinguished Lecturer Series, Co-Director.
4. 2012-2013 STARS Celebration of Computing, Program Chair for Celebration 2013.
5. 2011-Present. Auburn Gamers Group, Academic Advisor.
6. August 2009-Present. Society of Women Engineer's Auburn University, Academic Advisor.
7. February 2009-Present. Tapia Celebration of Diversity in Computing, Poster Judging.
8. Oct 2011-Present, Reviewer, Conference Paper, ASEE Regional Conference, USA
9. May 2009-present, Board of Advisors of a Company, Mississippi State University Computer Science Dept., Starkville, Mississippi, USA



10. May 2008-Present, Board of Advisors of a Company, Alabama Power Student Success Program, Auburn, Alabama, USA
11. May 2008-2012, Board of Advisors, Jackson State University Computer Science, Jackson, MS, USA
12. April 2008 - Present, Invited Lecture, ADMI/A4RC Conference [admiusa.org](http://admiusa.org)
13. Jan 2008 - 2011, Editor, Associate Editor, Engineering Pathways: Broadening Participation in Computing Collection, USA
14. 2008-2010, Sisters of the Academy Executive Committee
15. 2008-2009 Richard Tapia Conference of Diversity in Computing Committee
16. 2008-2009 SIGCSE 2009 Conference Committee, Posters.
17. July 2008 - Present, Served NSF Proposal Panel (2-4 grant reviews per year)
18. Mar 2008, Session Chair ACMSE
19. Feb 2008, Reviewer ACMSE Papers
20. Jan 2008, Reviewer EISTA Conference 2008
21. Oct 2007, Judge Student Posters Grace Hopper Conference 2007
22. Summer 2007, Served on 2 NSF Proposal Panels
23. Mar 2007, Judge –Alabama ALSAMP Scholars/BD Conference 2007
24. Feb 2007, Judge – Computer Science Olympiad - Programming Contest
25. 2007-2008, Sisters of the Academy Executive Committee
26. Dec 2006, Judge –South’s BEST Robotics Competition 2006
27. Oct 2006, Grace Hopper Conference 2006 Student Posters Co-Chair
28. Summer 2006, Served on 2 NSF Proposal Panels
29. Mar 2006, Judge –Alabama ALSAMP Scholars/BD Conference 2006
30. Oct 2005, AU SWE Chapter National conference chaperone
31. Summer 2005, Served on 2 NSF Proposal Panels
32. Feb 2005, Judge –Alabama ALSAMP Scholars/BD Conference 2005
33. Feb 2004, Judge –Alabama ALSAMP Scholars/BD Conference 2004
34. Oct 2004, Judge –South’s BEST Robotics Competition 2004
35. Feb 2003, Judge -Undergraduate Science and Engineering Conference 2003
36. 2003- present Society of Women Engineers
37. Feb 2002, Judge -Undergraduate Science and Engineering Conference 2002

### **University Service N=8**

***2021 – Present Presidential Taskforce for Inclusion & Diversity***

***2020 – 2022 – University Senate Executive Committee; Rules Committee***

***2018 – Present Design Review Committee***

Committee Member AY2018-2020

Approx. Number of Hours Spent: 4hrs in 2020; 8hrs in 2019; 8hrs in 2018.

***Committee Member***, AY2018-2020

Outreach Scholarship Committee & Community of Practice

Approx. Number of Hours Spent Per Year: 16

**2017**

***Search Committee***, Assistant Provost for Women’s Initiatives

Committee Member, April – June 2017

Approx. Number of Hours Spent: 16

***Committee Member***, 2017

Central Classroom Committee2 - Labs  
Approx. Number of Hours Spent Per Year: 4

**2016**      *Committee Member*, AY2016-2017  
Competitive Outreach Scholarship Grant Committee  
Approx. Number of Hours Spent Per Year: 16

**2015**      *Committee Member*, AY2015-2016  
Competitive Outreach Scholarship Grant Committee  
Approx. Number of Hours Spent Per Year: 16

*Committee Member*, AY2015-2016  
Competitive Outreach Scholarship Grant Committee  
Approx. Number of Hours Spent Per Year: 16

**2014**      *Committee Member*, 2014-2015  
Competitive Outreach Scholarship Grant Committee  
Approx. Number of Hours Spent Per Year: 16

*Committee Member*, November 2014- Feb 2015  
Competitive Outreach Scholarship Grant Committee  
Approx. Number of Hours Spent Per Year: 16

**2013**      *Committee Member*, November 2013- February 2014  
Central Classroom Committee  
Approx. Number of Hours Spent Per Year: 16

*Committee Member*, November 2013- February 2014  
Competitive Outreach Scholarship Grant Committee  
Approx. Number of Hours Spent Per Year: 16

*Committee Member*, November 2013- February 2014  
Central Classroom Committee  
Approx. Number of Hours Spent Per Year: 16

**2012**      *Committee Member*, November 2012- February 2013  
Competitive Outreach Scholarship Grant Committee  
Approx. Number of Hours Spent Per Year: 16

*Committee Member*  
Classroom Facility Committee  
Approx. Number of Hours Spent Per Year: 20

**2011**      *Committee Member*, November 2011  
Competitive Outreach Scholarship Grant Committee  
Approx. Number of Hours Spent Per Year: 16

*Committee Member*  
Classroom Facility Committee  
Approx. Number of Hours Spent Per Year: 20

**1/2009-  
12/2012**      ***Committee Member***  
Graduation Committee  
Approx. Number of Hours Spent Per Year: 24

***College of Engineering Service N=12***

**2021**      ***Search Committee***, Manager AEP  
Committee Member, 2021, Approx. Hours Spent: 24

**2017**      ***Search Committee***, Engineering Outreach Coordinator  
Committee Member, June – Aug. 2017 Approx. Hours Spent: 24

**2015**      ***Search Committee***, AEP Engineering Outreach Coordinator  
Committee Member, January – April 2015  
Approx. Number of Hours Spent: 24

***Committee Member***, AY2015-2016  
College Curriculum Committee  
Approx. Number of Hours Spent Per Year: 2

**August 2014-  
Present**      • SGCOE Faculty Research Colloquium

**Oct 2011-  
April 2011**      • Dean Search Committee

**2009- Present**      • ***E-Day 2009-2019 Committee to coordinate demonstrations/exhibits***  
• ***Faculty Council for NSF STEM*** ( Scholarships for Engineering Students from Underrepresented Groups)  
• ***SWE Advisor 2006-Present*** Society of Women Engineers

***Department Service N=20***

**2009-Present**      • Committee Member, CSSE Faculty Search Committee  
• ***E-Day Committee coordinate exhibits based on Auburn City Schools outreach project.***

**2008-Present**

- *Faculty Search Committee*
- *E-Day Committee coordinate exhibits based on Auburn City Schools outreach project.*
- *Computer Science Recruiting  
STARS conference, Spelman College, ADMI conference, FAMU,  
North Carolina A&T, Georgia Southern, and Tuskegee University*

*College of Engineering Service*

*E-Day 2008 - Present*

*University Service*

*NASA Space Grant Scholarship Selection Committee*

*University Graduation Committee*

*National Service*

1. *Association for Computing Machinery Special Interest Group for Computer Science Education (SIGCSE 2014, SIGCSE 2015)*
2. *Program Committee Association for Computing Machinery (ACMSE 2008) Program Committee*
3. *STARS Conference Student Leadership Conference (Executive Steering Committee and Conference Chair 2013.*
4. *Richard Tapia Celebration of Diversity in Computing Program Committee, 2020 Poster Review*
5. *Special Interest Group in Computer Science Education Program Committee (SIGCSE 2009)*
6. *SOTA executive committee with headquarters at Auburn University. SOTA (Sistersoftheacademy.org) is a Mentoring Network for minority women in the academy. SOTA activities include the following:*
  - *Research Boot Camp Committee (July2009)*
  - *Website operations coordinator*

**2007-2008**

*Department Service*

*-EDay Committee coordinated exhibits based on Auburn City Schools outreach project.*

*-WISE (Women in Science and Engineering)*

*Exploratory Meetings for Women in Computing Network Organization, Initial Web Design (ACM-W)*

*-Computer Science Recruiting*

*ADMI conference, Spelman College, FAMU, North Carolina A&T, and Tuskegee University*

*College of Engineering Service*

*E-Day 2008*

University Service

**NASA Space Grant Scholarship Selection Committee**

**Application to Wellness Committee**

University Graduation Committee

National Service

**1. Association for Computing Machinery (ACMSE 2008) Program Committee**

**2. Richard Tapia Celebration of Diversity in Computing**

Program Committee

3. Special Interest Group in Computer Science Education

Program Committee (SIGCSE 2009)

4. SOTA executive committee with headquarters at Auburn University. SOTA (Sistersoftheacademy.org) is a Mentoring Network for minority women in the academy. SOTA activities include the following:

1. *Research Boot Camp Committee (July 2007)*

2. *Research Symposium Committee (Nov 2007-April 2008)*

3. *Website operations coordinator*

**2006-2007**

Department Service

E-Day Committee coordinated exhibits based on Cary Woods elementary school outreach project.

WISE (Women in Science and Engineering)

Exploratory Meetings for Women in Computing Network

Organization, Initial Web Design (ACM-W)

Computer Science Recruiting at ADMI conference, Spelman College and FAMU

College of Engineering Service

E-Day 2007

University Service

NASA Space Grant Scholarship Selection Committee

National Service

1. Grace Hopper Conference (GHC 2006) Program Committee

2. SOTA executive committee. SOTA activities for 2006 include the following:

a. *Research Boot Camp Committee (July 2007)*

b. *Research Symposium Committee (Nov 2007)*

c. *Website operations coordinator*

**2005-2006**

Department Service

E-Day Committee

WISE (Women in Science and Engineering)

Exploratory Meetings for Women in Computing Network

Organization, Initial Web Design (ACM-W)



College of Engineering Service

SWE Chapter chaperone with local SWE Chapter at National Conference

University Service

Women's Resource Center Advisory Committee

National Service

SOTA executive committee (headquarters at Auburn University)

1. Mentoring and support network for minority women in the academy
2. Duties assist with planning of National meeting in May at Auburn
3. Finance and Resource Development officer
4. Research Boot Camp Committee (July 2005)
5. Website operations coordinator

**2004-2005**

Department Service

E-Day Committee

Exploratory Meetings for Women in Computing Network Organization

University Service

SOTA executive committee (headquarters at Auburn University)

1. Mentoring and support network for minority women in the academy
2. Duties assist with planning of National meeting in May at Auburn
3. Membership officer

**2003-2004**

Department Service

E-Day Committee 2003

**Doctoral Graduates (Major Professor) N=14** underrepresented minority and/or domestic women

Graduate Student	Graduation Date	Position
1. Fred Strickland	May 2008	Instructor, Southern University, Assistant Professor, University of Maine
2. Sheldon Linker	May 2012	VP/CTO Linker Systems (Comp. Software)
3. Justus Nyagwencha	May 2013	University of Maryland University College, Adjunct Professor
4. Albanie Bolton	May 2014	Assistant Professor, Hampton University
		Data Analysis & Systems Engineer, NASA Marshall Space Flight Center
5. Cheryl Swanier	December 2015	Assistant Professor, Alabama A&M University
		CS Department Head, Claflin University
		CS Associate Professor (previous) Fort Valley State University
6. Candice Harris Adams	May 2017,	Center for Disease Control – Atlanta
7. Cathy Bailey	May 2017,	Center for Disease Control – Atlanta
8. Xuechao Li	May 2017,	Assistant Prof. Concordia College – Chicago
		Lecturer, Auburn University
9. Yang Cao	August 2019	Software Engineer, Facebook – New York
10. Javier Livio Zarvarce	Dec 2020	Senior Assoc. J.P. Morgan Chase, Houston, Texas
11. Ujan Mukhopadhyay,	Dec 2021	Faculty Florida Polytechnic University

12. Sicheng Li	Dec 2021	Software Engineer, Facebook
13. Nikolay Sargsyan	May 2022	Software Engineer
14. Jueting Liu	August 2022	Assistant Professor

**Masters Graduates (Major Professor N=76)** underrepresented minority and/or domestic women

1. Sumitha Kanakadoss **MS**, Summer 2005 Lead Programmer Analyst, Follett Higher Education Group
2. Dr. Kyuhan Koh, **MSCS** Summer 2007 University of California, Assistant Professor  
Virginia Tech, Researcher Scientist  
UC Boulder Colorado for PhD
3. Thomas Whittaker **MS**, Fall 2007 TSYS (Software Development), Columbus, Georgia
4. Kelley Clanton, **MS** Fall 2008 IT Specialist, Auburn University
5. Feng Wu **MS**, Spring 2009 EPIC, Software Developer, Madison, Wisconsin
6. Manasa Nimminkayala Reddy **MS**, Spring 2009 Infor, Software Engineer, Atlanta, Georgia
7. Nidhi Gupta **MS**, Spring 2010 Apple, Software Engineering Author, Cupertino  
(*retained as Ph.D. Student*), Earned PhD Auburn
8. Dr. Albanie Bolton **MSCS**, Spring 2010, NASA Marshall Flight Center, Huntsville, Alabama  
Alabama A&M State University, Adjunct Professor  
Howard University, Assistant Professor,  
Earned PhD at Penn State
9. Dr. Curtis Cain **MS**, Summer 2010 The University of Alabama in Huntsville, Research Scientist II
10. Kevin Simmons **MS**, Summer 2010 Intel Corporation, Software Engineer
11. Vasavi Chilamantula **MS**, Fall 2010, CGI, Software Consultant, Auburn, Alabama
12. Abilash Kittanna **MS**, Spring 2010, Alert Logic, Product Manager | UX | Platform Service
13. Rahul Potghan **MS**, Summer 2011, Center for Disease Control – Atlanta
14. Dr. Candice Adams **MS**, Spring 2011, Data Quality Lead/Informatica Developer at Smith & Nephew Orthopaedics
15. Ram Bharat Reddy Bontha, Summer 2011, Saram Solutions, Inc. – previous position  
SR SAP BODS Consultant/ Data Migration  
VMware/Windows Administrator at Novisync Solutions\*
16. Rajashekar Erri **MS**, Spring 2011 Software Developer, Atlanta Georgia
17. Stanley Hailey **MS**, Fall 2011 The Weather Channel – Weather Underground
18. Sonali Pandey **MSWE**, Spring 2012 Mobile Software Developer - Backend
19. Rajitha Gondi **MS**, Summer 2012 Infogroup, .Net Full-Stack Developer
20. Sreevishal Chapalamadugu **MS**, Fall 2012 Intel, Software Engineer
21. Marlon Thompson, Fall 2012 Missile Defense Agency, General Engineer, Huntsville, AL
22. Leretha Childress **MS**, 2013 Software Development Instructor – ITT  
Plant Manager, Shankles Finishing Plant
23. Vijith Reddy Bheemireddi 2013 Senior Technical Consultant, Perficient  
Technical Account Manager/ Customer Success Manager at Cloudera
24. Sruthi Yalamanchili **MS** 2013 Eze Software Group
25. Adam Paul, Fall 2014 Software Developer, Acuity Brands
26. Andrew Pitchford 2014 iOS Software Engineer at Metova
27. Donald Hutchinson 2014 AVP Automation Testing Manager at Regions Financial Corporation
28. Jared Alewine **MS**, Summer 2014 Program Analyst at Michelin
29. Chunyu Li (Chunyi Wyeth), Summer 2014 UX Designer at Amadeus, Boston, MA

30. Santosh Nagaral MS, Fall 2014
  31. Nayana Teja Talluri MSWE, Spring 2015
  32. Rohit Pendayala MSWE, Spring 2015
  33. Sarthak Kakkar MS, Summer 2015
  34. Kartheek Paidipalli MSWE, Fall 2015
  35. Jeff Brown, MSWE, Apple Spring 2016
  36. Sarath Kuchi, MSWE, Spring 2016
  37. Qian Zhang, MSWE, Fall 2016
  38. Chungzhang, Mo, MSWE, Fall 2016
  39. Akshara Amuri, MSWE, Spring 2017
  40. Jesse Gamez, MSWE Fall 2017
  41. Sai Siddhartha Vungarala, Fall 2017
  42. Wei Cai, MSWE, Fall 2017
  43. Anjali Singh, MSWE, Fall 2017
  44. Sonali Rege, MSWE, Fall 2017
  45. Nandakrishnan Ramesh, MS Fall 2017
  46. Bala Nandakumar Ravilla, MS Fall 2017
  47. Dr. Akolade Issac Asipade, MSWE Fall 2017
  48. Dr. Yang Cao, Fall 2017 (anticipated)
  49. Arivunambi Thirugnanamurthy, Fall 2017
  50. Amjad Alobaily, Spring 2018; **MSCS**
  51. Ananya Rao Tadakamalla, Spring 2018
  52. Guorui Li, **MSCS**, Spring 2018
  53. Mohammad Ali Alamdar Yazdi **MSCS**, Spring 2018 (*continuing to PhD ISE*)
  54. Onyinye Asogwa, Spring 2018
  55. Sai Venkat Gopu, Spring 2018
  56. Anjali Singh, Spring 2018
  57. Sonali Rege, Spring 2018
  58. Kushagar Ahlawat, Spring 2018
  59. Qitong Zhang, Spring 2018
  60. Vinod Channigarayapuragovindareddy, MSWE, Spring 2018
  61. Ravinder Putta, Spring 2018
  62. Swati Gupta, Summer 2018
  63. Chang Ren MSWE, Summer 2018
  64. Muzi Li, MSWE, Summer 2018
  65. Boning Liang, MSWE, Summer 2018
  66. Yingzhi Yang, MSWE Spring 2018
  67. Dr. Sicheng Li, Summer 2018
  68. Surabh Gupta, MSWE, Summer 2018
  69. Yaoxuan Luan MSWE, Fall 2019
- Software Engineer at Intel Corporation  
ERS Consultant at Deloitte & Touche LLP  
Software Engineer at Intel Corporation  
Mobile Application Developer at Mount Sinai Health System  
Cognizant Technology Solutions, Programmer Analyst  
Apple, iOS developer  
Equifax  
F5 Networks in Seattle  
Amazon  
Software Development in India  
Northrup Grumman, Huntsville, AL  
Software developer, Birmingham (began Auburn MBA)
- Version3, UI Software Developer, Montgomery, AL  
Blue Cross Blue Shield, Birmingham  
Bomgar (Secure Access Solutions)  
Software Developer, Jackson, MS  
*(retained as Ph.D. Student)*  
*(retained as Ph.D. Student)*  
Salesforce, Birmingham  
National Information Center, Manager of Continuity and Availability processes  
Saudi Arabia  
Mueller Water Products, Atlanta.  
Tact.ai, Android Developer, California.
- Earned PhD Auburn ISE  
*(retained as Ph.D. Student)*  
InComm InCentives, Software Engineer, St. Louis, MO  
CGI, Automation Developer, Auburn, AL  
Y&L Consulting, Inc., Business System Analyst, SanAntonio, TX  
Nationwide, System Analyst, Columbus, Ohio  
Software Engineering, China
- Version3, Lead Software Developer, Montgomery, AL  
*(retained as Ph.D. Student)*  
Power China Environmental Engineering  
Assistant Engineer  
R & D Engineer at China Justice Big Data Institute  
Lenovo, Assoc. Integration Engineer, China.  
*(retained as Ph.D. Student)*  
United Healthcare, Washington, DC.  
*(retained as Ph.D. Student)*

- |   |                                      |
|---|--------------------------------------|
| 70. Jaowan Shin MSWE, Fall 2019             | Software Engineer at NCR Corporation |
| 71. Simin Liu MSWE, Fall 2019               |                                      |
| 72. Soundarya Korlapati, MSWE Spring 2020   | <i>(retained as Ph.D. Student)</i>   |
| 73. Rong Song, MSWE, Spring 2020            |                                      |
| 74. Jordan Price, MSWE, Fall 2020           |                                      |
| 75. Ishaan Mishra, Spring 2021              |                                      |
| 76. Xin Wei, Spring 2021                    | <i>(retained as Ph.D. Student)</i>   |
| 77. Uma Prasanna Athikala, MSWE Summer 2021 |                                      |

### **Doctoral Student Supervising (Major Professor) N=15**

- |                        |                                       |
|------------------------|---------------------------------------|
| 1. Majdi Lusta         | ABD Spring 2021                       |
| 2. Sadaira Packer      | ABD Fall 2021 (co-chair Gerry Dozier) |
| 3. Sarp ArKent         | ABD Fall 2021                         |
| 4. Sathish Akula       | ABD Fall 2021                         |
| 5. Onyinye Asogwa      | ABD Fall 2021                         |
| 6. Tianshi Xie         | ABD Spring 2022                       |
| 7. Alexicia Richardson | ABD Spring 2022                       |
| 8. Soundarya Korlapati | planned ABD Fall 2022                 |
| 9. Chang Ren           | planned ABD Fall 2022                 |
| 10. Yaoxuan Liu        | planned ABD Spring 2023               |
| 11. Chaohui Ren        | planned ABD Spring 2023               |
| 12. Muhammad Gulfam    | Second Year PhD                       |
| 13. Mostafa Rahgouy    | Second Year PhD                       |
| 14. Morgan Burcham     | Second Year PhD                       |
| 15. Amit Das           | Second Year PhD                       |

### **MS Students Supervising (Major Professor) N=1**

- |             |                           |
|-------------|---------------------------|
| 1. Sean Kim | (anticipated Spring 2023) |
|-------------|---------------------------|

### **Graduate Committees (N=12 for 2021)**

- |                            |     |                 |
|----------------------------|-----|-----------------|
| 1. Asipade, Akolade        | PhD | 2021 (co-chair) |
| 2. Bandekar, Anjaneya      | PhD | 2021            |
| 3. Bhattacharya, Tathagata | PhD | 2021            |
| 4. Brown, Brandon          | PhD | 2021            |
| 5. Cui, Qi                 | PhD | 2021            |
| 6. Feng, Dongji            | PhD | 2021            |
| 7. Halladay, Steve         | PhD | 2021            |
| 8. Kalin, Josh             | PhD | 2021            |
| 9. Smith, Marcellus        | PhD | 2021            |
| 10. Taylor, Gabrielle      | PhD | 2021            |
| 11. Topuz, Fatma Neda      | PhD | 2021            |
| 12. Wei, Chaohua (Victor)  | PhD | 2021            |

## **Undergraduate Student Research & Supervision Fall/Spring (N=46)**

### **Fall 2022**

1. Bryce Ellis
2. Kaliyah Fisher
3. Selom Gadzey
4. Jalen Powel
5. Mitchell Sullivan

### **Spring 2022**

6. Swati Baskiyar
7. Bryce Ellis

### **Spring 2020-Spring Fall 2021**

8. Swati Baskiyar

### **Fall 2019 – Spring 2020**

9. Ezra Hill
10. Maya Ifekauche

### **Fall 2018**

11. Maya Ifekauche

### **Spring 2018**

12. Amy Cheng
13. Shanni Patel
14. Elijah Hampton
15. Ebbrea Wilson
16. +Jessica Knezha, B.S. CS Honors Project Supervisor (Game Development)
17. +Carmen Stowe, B.S. CS Honors Project Supervisor (Game Development)
18. +Alexis Taylor, B.S CS Honors Project Supervisor (Game Development)

### **Fall 2017**

19. Morgan Hood
20. Jerron Spraggins

### **Spring 2017**

21. Fara Fadamiro
22. Morgan Hood

### **Fall 2016**

23. Jesse Gamez
24. Christopher Strong

### **Spring 2016**

25. Jonathan Sims
26. Marvin Royal
27. Morgan Hood
28. Victor Jones

### **Spring 2015**

29. Angela Steward B.S. CS Honors Project Supervisor (Senior Design) - Spring 2016
30. Donovan Jordan B.S. CS Spring 2015
31. Jesse Gamez B.S. CS Fall 2015
32. Jacob Scott – STARS Tutoring Outreach Supervisor
33. Kenneth Strait - STARS Tutoring Outreach Supervisor
34. John Cook - STARS Tutoring Outreach Supervisor

### **Fall 2014**

35. Adam Coleman – Undergraduate Research
36. Jesse Gamez – Undergraduate Research  
Jesus Gamez – STARS Tutoring Outreach Supervisor
37. Heather Neely – STARS Tutoring Outreach Supervisor
38. Taylor Lucy – STARS Tutoring Outreach Supervisor
39. Luke Aaron Williamson - STARS Tutoring Outreach Supervisor
40. Christopher S. Strong – STARS Tutoring Outreach Supervisor
41. James Cox – STARS Tutoring Outreach Supervisor
42. John Cook – STARS Tutoring Outreach Supervisor
43. Tarence Beard, Jr. – STARS Tutoring Outreach Supervisor
44. Jacob Scott – STARS Tutoring Outreach Supervisor
45. Kenneth Strait – STARS Tutoring Outreach Supervisor

### **Spring 2013**

46. Jacob Conoway – B.S. CS Honors Project Supervisor

### **Summer REU (average time supervised 10 weeks) N=36**

#### ***All are underrepresented minority and/or domestic women***

1. Jalen Powell Summer 2022, B.S. CS (anticipated Dec 2023)
2. Camron Rogers Summer 2022, B.S. CS (anticipated Dec 2023)
3. Joshua Swanier Summer 2022, B.S. CS (anticipated Dec 2023)
4. Tatiana Sabanero Summer 2021, B.S. May 2022, currently in graduate school
5. Quincy Henry Summer 2019, B.S. Math, May 2020
6. Adam Swanier Summer 2019, B.S. CASE REU, currently Ph.D. student
7. Arian Williams Summer 2018, B.S. CS, May 2020)
8. Koran Wright Summer 2018, B.S. CS, May 2020)
9. Jerrion Joy Summer 2018, B.S. CS, (2<sup>nd</sup> REU at AU)
10. Phoebe Burns Summer 2017, B.S. CS,
11. Jerrion Joy Summer 2017, B.S. CS,
12. Sam Turray Summer 2017, B.S. IDS.
13. Tino Monroe Summer 2017, B.S. ECE.
14. Morgan Hood Summer 2017, B.S. CS.
15. Cameron Walker Summer 2017, B.S. CS
16. Steven Mitchell Summer 2017, B.S. CS, (anticipated May 2020)
17. Amber Jackson Summer 2016. B.S. CS.
18. Edward Ojo Summer 2016, B.S. CS, (anticipated 2019)
19. Marvin Royal Summer 2016, B.S. CS, (anticipated 2019)
20. Devon White Summer 2016, B.S. CS.
21. Gwendolyn Tennell Summer '15, B.S. CS.
22. Grant Pope Summer '15, B.S. CS.
23. Andre McFarland Summer '14, B.S. CS. Spring 2015
24. Cecili Reid Summer '13, B.S. CS. Spring 2014
25. Jonathan Ray Johnson Summer '13, B.S. CS. Spring 2014
26. Lacey Wright AUREU Summer '13, CS. Spring 2014
27. Elizabeth Devore Summer '13, B.S. ISE. Spring 2014 (Auburn Ph.D. Student)
28. Otelia Buffington Summer '12 CS. Spring 2013



29. Kiara Coston	Summer '12, B.S. CS. Fall 2014
30. Ashley Cagle	Summer '10, B.S. Math, Spring 2011
31. Edward Hull	Summer '10, B.S. CS, Spring 2012
32. Navorro Houser	Summer '10, B.S. CS, Fall 2010
33. Jared Thorpe	Summer '10, B.S. CS, Spring 2011
34. Joi Upton	Summer '10, B.S. CS, Spring 2012
35. Marlana Carrington	Summer '09, B.S. Math, Spring 2010
36. Britni Marcelin	Summer '09, B.S. Math, Spring 2011
37. Junes Thete	Summer '09, B.S.CS, Spring 2010
38. Joe Shanahan	Summer '09, B.S. CS, Spring 2010
39. James Bedenbaugh	Summer '08, B.S. CS, Spring 2010
40. Shantavious Williams	Summer '06, B.S. CS, Spring 2007
41. Chittra Tibbs	Summer '05, B.S. CS, Spring 2006
42. Brandi Smith	Summer '04, B.S. CS, Spring 2005