

Michael P. Verdicchio
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Department of Cyber and Computer Sciences
Charleston, SC 29409

Education

2006–2013 **PhD**, Computer Science, Arizona State University
Dissertation: Gene Regulatory Networks: Modeling, Intervention, and Context
Advisor: Seungchan Kim, PhD
2001–2006 **BSE**, Computer Systems Engineering, Arizona State University

Appointments

2017– Associate Professor (with tenure), The Citadel
2011– Affiliate Faculty, College of Charleston
2011–2017 Assistant Professor (tenure-track), The Citadel
2008–2011 Graduate Research Associate, Arizona State University
2008–2011 Faculty Associate, Arizona State University
2006–2010 Graduate Teaching Associate, Arizona State University

Awards & Honors

2024 ACM Senior Member
2021 Sabbatical Leave, "Developing Programs of Distinction in Software Engineering"
2018 Faculty Excellence Award in Teaching
2014 C.A. Medberry Excellence in Teaching Award

Teaching

The Citadel

The teaching load at The Citadel is 12 credit hours per semester, with occasional overloads, reductions for extra service, and optional summer courses. Asterisks indicate significant course revisions requiring new preparations.

Course	Title	Sections
CSCI 103	Survey of Computer Science*	3
CSCI 110	Microcomputer Applications*	11
CSCI 201	Intro to Computer Science I*	30
CSCI 202	Intro to Computer Science II	4
CSCI 205	Intro to Programming W/ Python	5
CSCI 210	Intro to Information Systems*	6
CSCI 211	Intro to Comp Science I Lab	5
CSCI 223	Data Structures and Algorithms*	18

CSCI 290	Intro to Information Systems*	1
CSCI 305	Computer Organization & Programming	2
CSCI 355	Programming Languages	1
CSCI 399	Junior Research Project	1
CSCI 420	Software Engineering*	9
CSCI 421	Software Engineering Practicum	7
CSCI 491	Internship in Computer Science	14
CSCI 495	Senior Seminar	6
CSCI 499	Senior Research Project	5
CSCI 602	Foundations of Software Engineering*	10
CSCI 636	IT Policy Strategy & Governance	2
CSCI 654	Software Requirements Analysis	2
CSCI 658	Software Testing & Maintenance*	4
CSCI 690	Special Topics: Software Deployment and Operations	1
CSCI 691	Independent Study	2
HONR 400	Honors Research Project I	1
LDRS 411	Sr Leadership Integration Seminar	3
	Total Sections	153
	Total Preparations	34

Arizona State University

Course	Title	Term
CSE 182	Applied Problem Solving with C#.NET	spring 2011
CSE 110	Principles of Programming with Java	fall 2010, summer 2008

Publications

Authorship order indicates the degree of intellectual contribution to the work, except for student work, where advisors or co-advisors are placed last.

† Equal contribution * Undergraduate student + Graduate student

Peer-reviewed Conference Papers

Unlike much of academia, premiere conferences in computing are considered high-quality, selective venues for archival research. These conferences exceed many journals in their selectivity, visibility, and impact.

- [1] **M. Verdicchio**, “Adapting program assessment for the age of generative AI,” in *2025 IEEE Engineering Education World Conference (EDUNINE)*, 2025, pp. 1–6. DOI: [10.1109/EDUNINE62377.2025.10981409](https://doi.org/10.1109/EDUNINE62377.2025.10981409).
- [2] S. Caraco⁺, N. Lojo*, **M. Verdicchio**, and A. Fox, “Generating multi-part autogradable faded parsons problems from code-writing exercises,” in *Proceedings of the 55th ACM Technical Symposium on Computer Science Education V. 1*, 2024, pp. 179–185. DOI: [10.1145/3626252.3630786](https://doi.org/10.1145/3626252.3630786).
- [3] **M. Verdicchio**, “Hurricanes and pandemics: An experience report on adapting software engineering courses to ensure continuity of instruction,” in *Journal of Computing Sciences in Colleges*, vol. 36, Consortium for Computing Sciences in Colleges, 2021, pp. 150–159.
- [4] S. T. Ghanat, D. Garner, J. Howison, R. A. Hunter, B. Baker Swart, S. M. Banik, **Verdicchio, M.**, and N. J. Washuta, “Students’ perception of a summer undergraduate research experience: Across the disciplines,” in *ASEE Annual Conference & Exposition*, 2018. DOI: [10.18260/1-2--31024](https://doi.org/10.18260/1-2--31024).
- [5] **M. Verdicchio**, D. Joshi, and S. M. Banik, “Embedding cybersecurity in the second programming course (CS2),” in *Journal of Computing Sciences in Colleges*, Consortium for Computing Sciences in Colleges, vol. 32, 2016, pp. 165–171. DOI: <https://dl.acm.org/doi/10.5555/3015063.3015089>.

- [6] S. Jung, **M. Verdicchio**, J. Kiefer, M. Berens, and S. Kim, “Learning contextual gene set interaction networks of glioblastoma and identifying subtype specificity,” in *Eighth International Workshop on Computational Systems Biology (WCSB 2011)*, Zurich, Switzerland, 2011.
- [7] **M. Verdicchio** and S. Kim, “Identifying targets for intervention by analyzing basins of attraction,” in *Bio-computing 2011*, World Scientific Publishing Company, 2011, pp. 350–361. DOI: [10.1142/9789814335058_0036](https://doi.org/10.1142/9789814335058_0036).
- [8] I. Sen[†], **Verdicchio[†]**, **Michael**, S. Jung, R. Trevino*, M. Bittner, and S. Kim, “Context-specific gene regulations in cancer gene expression data,” in *Biocomputing 2009*, World Scientific Publishing Company, 2009, pp. 75–86. DOI: [10.1142/9789812836939_0008](https://doi.org/10.1142/9789812836939_0008).

Peer-reviewed Journal Articles

Journal articles, while still highly regarded in computing, are not a primary venue for most researchers, often playing the role of extended versions of already robust conference papers.

- [1] J. Andrus*, S. Banik, B. B. Swart, and **M. Verdicchio**, “Multicast routing using delay intervals for collaborative and competitive applications,” *IEEE Transactions on Communications*, vol. 66, no. 12, pp. 6329–6338, 2018. DOI: [10.1109/TCOMM.2018.2861893](https://doi.org/10.1109/TCOMM.2018.2861893).
- [2] **M. Verdicchio** and S. Kim, “Template-based intervention in boolean network models of biological systems,” *EURASIP Journal on Bioinformatics and Systems Biology*, vol. 2014, pp. 1–17, 2014. DOI: [10.1186/s13637-014-0011-4](https://doi.org/10.1186/s13637-014-0011-4).
- [3] S. Jung, **M. Verdicchio**, J. Kiefer, D. V. Hoff, M. Berens, M. Bittner, and S. Kim, “Learning contextual gene set interaction networks of cancer with condition specificity,” *BMC Genomics*, vol. 14, pp. 1–18, 2013. DOI: [10.1186/1471-2164-14-110](https://doi.org/10.1186/1471-2164-14-110).
- [4] D. Bryce, **M. Verdicchio**, and S. Kim, “Planning interventions in biological networks,” *ACM Transactions on Intelligent Systems and Technology (TIST)*, vol. 1, no. 2, pp. 1–26, 2010. DOI: [10.1145/1869397.1869400](https://doi.org/10.1145/1869397.1869400).

Textbook

- [1] R. Meyer and M. Verdicchio, *Explorations in Computer Science*, 3rd. Ed. Jones & Bartlett Learning, 2016.

PhD Dissertation

- [1] **M. Verdicchio**, *Gene regulatory networks: Modeling, intervention, and context*, 2013. DOI: <https://hdl.handle.net/2286/R.I.18115>.

Technical Report

- [1] **M. Verdicchio** and S. Kim, “Reduction of boolean network basins of attraction reveals intervention targets,” Arizona State University, Tempe, AZ, USA, Tech. Rep., 2010.

Future Work and Projects

My current scholarship extends recent work on the impact of generative artificial intelligence (AI) on assessment validity in computing and engineering education. Building on the CS 2023 curricular recommendations, I am developing frameworks for **AI-aware learning outcomes and performance indicators** that align with ABET accreditation criteria and contemporary professional practice.

Planned manuscripts include *Redefining Learning Outcomes for Computing and Engineering Education in the Age of Generative AI*, a position paper proposing a taxonomy of new AI-related competencies and rubric-level

descriptors; and *Structuring Generative AI Use through Staged Assessment in Computing Education*, an experience report on my classroom model requiring design work prior to AI use. A third work, *Toward Generative-AI-Resilient Assessment Frameworks for ABET-Aligned Programs*, integrates these ideas into a systems view of program-level assessment.

Presentations

Oral Presentations of Peer-Reviewed Conference Papers

- [1] **M. Verdicchio**, *Adapting program assessment for the age of generative AI*, IEEE World Engineering Education Conference (EDUNINE), Montevideo, Uruguay (virtually), Mar. 2025.
- [2] **M. Verdicchio**, *Hurricanes and pandemics: An experience report on adapting software engineering courses to ensure continuity of instruction*, Journal of Computing Sciences in Colleges, virtual, Jan. 2021. DOI: <https://dl.acm.org/doi/abs/10.5555/3447307.3447321>.
- [3] **M. Verdicchio**, D. Joshi, and S. M. Banik, *Embedding cybersecurity in the second programming course (CS2)*, Consortium for Computing Sciences in Colleges, Asheville, NC, USA, 2016.
- [4] **M. Verdicchio** and S. Kim, *Identifying targets for intervention by analyzing basins of attraction*, Pacific Symposium on Biocomputing, Waimea, HI, USA, 2011.

Oral Presentations of Peer-Reviewed Abstracts

- [1] **M. Verdicchio**, *The impact of AI tools on assessment data*, 2024 ABET Symposium, Tampa, FL, USA, Apr. 2024.
- [2] C. Healy, A. D. Digh, P. Gabbert, and **M. Verdicchio**, *Effective pedagogical practices in the computer science classroom*, Consortium for Computing Sciences in Colleges, Greenville, SC, USA, 2021.
- [3] G. Alterovitz, **Verdicchio, M.**, S. Cavalcanti, M. Wang, and M. Ramoni, *Reverse engineering and synthesis of biomolecular systems*, Pacific Symposium on Biocomputing, Waimea, HI, USA, 2011.
- [4] **M. Verdicchio** and S. Kim, *Boolean network models of human aging*, 7th Annual Rocky Mountains Bioinformatics Conference (ROCKY 09), Snowmass, CO, USA, 2009.

Poster Presentations of Peer-Reviewed Abstracts

- [1] **M. Verdicchio**, *Creating a devops course*, Proceedings of the 54th ACM Technical Symposium on Computer Science Education (SIGCSE), Toronto, ON, CA, 2023.
- [2] **M. Verdicchio** and S. Kim, *Template-based intervention in boolean network models of biological systems*, 22nd Annual International Conference on Intelligent Systems for Molecular Biology (ISMB), Boston, MA, USA, 2014.
- [3] **M. Verdicchio** and S. Kim, *Identifying targets for intervention by analyzing basins of attraction*, Pacific Symposium on Biocomputing, Waimea, HI, USA, 2011.
- [4] D. Bidaye, J. Dzifcak, D. Stracuzzi, R. Chimera, **M. Verdicchio**, J. Furber, S. Kim, and P. Langley, *An interactive environment for visualizing, interpreting, and revising biological process models*, Research in Computational Molecular Biology (RECOMB) 2009, Tucson, AZ, USA, 2009.
- [5] **M. Verdicchio** and S. Kim, *Boolean network models of human aging*, 7th Annual Rocky Mountains Bioinformatics Conference (ROCKY 09), Snowmass, CO, USA, 2009.
- [6] **M. Verdicchio**, X. Zhang, C. Baral, and S. Kim, *Learning causal relationships between genes from steady state data: Algorithms, simulation and application*, 6th Annual Rocky Mountains Bioinformatics Conference (ROCKY 08), Snowmass, CO, USA, 2008.

Other Published Evidence of Scholarship

- [1] **M. Verdicchio**, “Book review of exploring discrete dynamics, by Andrew Wuensche,” *Journal of Cellular Automata*, vol. 3, p. 285, 2012.
- [2] M. Verdicchio, “Jump-starting your bioinformatics career as an undergraduate: One student’s approach,” *ACM Crossroads*, vol. 13, no. 1, p. 5, Sep. 2006, ISSN: 1528-4972. DOI: [10.1145/1217666.1217671](https://doi.org/10.1145/1217666.1217671).

Student Supervision

Student Research Supervision

2023	Nicholas KRAFTOR . <i>Data-Driven Insights into Societal Unrest: Identifying Correlating Patterns Emerging from Local News Sources</i> . MS Thesis Committee Member.
2020	Zachary Lavallee . <i>Securing Healthcare Devices with Blockchain Technology</i> . Poster presentation at Student Excellence Day, The Citadel.
2020	Trey Stevens . <i>A Prototype Blockchain Application Using Hyperledger Technology</i> . Poster presentation at Student Excellence Day, The Citadel. Co-advisors: Shankar Banik, Antara Mukherjee.
2019	Jacob Blankenship . <i>Minimum Length Corridor Problem</i> . Poster presentations at Student Excellence Day and the CASM Banquet, The Citadel. Co-advisors: Shankar Banik, Breeanne Baker Swart.
2018	Andrew Seay . <i>Exploratory research on blockchain technology</i> .
2017–2018	James Andrus . <i>Ensuring Secure and Fairly Timed Network Communication</i> . Co-advisors: Shankar Banik, Breeanne Baker Swart. <ul style="list-style-type: none">• SoCon Undergraduate Research Forum (SURF), Wofford College, October 28–29, 2016• Student Research Contest at the 2016 Southeast Conference of the Consortium for Computing Sciences in Colleges (CCSC-SE) on 04–05 November, UNC Asheville (also awarded short oral presentation slot).• Kennesaw Mountain Undergraduate Mathematics Conference, February 17–18, 2017 (oral presentation).• MAA Southeastern Section 96th Annual Meeting, Mercer University, March 10–11, 2017 (oral presentation).• Citadel Student Research Conference, The Citadel, March 17, 2017 (poster and oral presentations). 3rd Place Award for poster.
2013–2014	Christopher Mims and Joseph McKenzie, with assistance from Ike Clinton, Joshua Terry, and Peter Joseph . <i>Improving Biological Network Analysis with High Performance Computing</i> . Poster presentations at Student Excellence Day, the CASM Banquet, and the Student Research Contest at the 2013 Southeast Conference of the Consortium for Computing Sciences in Colleges (CCSC-SE).
2013	Lucas Crawford and Jonathan Hager . <i>Boolean Network Workbench for Medical Research</i> . Poster presentations at Student Excellence Day, 3rd Place Award.
2008–2009	Milad Behbahania . <i>Studying and Improving Current Approaches for using a Bayesian Framework for Modeling Gene Regulatory Networks</i> . Poster presentation at the Fulton Undergraduate Research Initiative Symposium.

Student Independent Study Supervision

2024	Richard Owings . <i>CSCI 691 Independent Study: DevSecOps Topics</i> . Three reports produced on containerization, DevSecOps, and a prototype application.
2024	Vincent Rivera . <i>CSCI 495 Senior Seminar</i> .

2023 **Rahash Marasini.** *CSCI 201 Introduction to Computer Science I.*
 2019 **Zhao Qingchen.** *CSCI 103 Survey of Computer Science.*

Student Internship Supervision

As the Internship Coordinator for the Department of Cyber and Computer Sciences, I ensure that internship responsibilities for the position and submitted student work products meet all requirements for academic credit.

2022-2023 **Devin Kiernan.** *South Carolina Ports Authority. Third Party Risk Management.*
 2021 **Carey Chastain.** *Gnosos Companies.*
 2021 **Jalen Singleton.** *Blackbaud.*
 2021 **Trey Stevens.** *Naval Information Warfare Center Atlantic (NIWC).*
 2021 **Laith Williams.** *Code and Trust.*
 2020 **Ryan Skibicki.** *Marine Forces Cyber Command (MARFORCYBER).*
 2020 **Nathaniel Ballard.** *Naval Information Warfare Center Atlantic (NIWC).*
 2020 **Mafer Contreras.** *Cyber Vet Solutions, LLC.*
 2020 **Richard Honeycutt.** *Soteria.*
 2018 **William Couchenour.** *Assistive Communications Technologies.*
 2017 **Andrew Seay.** *Citadel Office of Study Abroad, International, and Domestic Programs.*
 2016 **Lance Cook.** *Federal Bureau of Investigation (FBI).*
 2016 **Christopher Landry.** *Federal Law Enforcement Training Center (FLETC).*
 2016 **William Sloane.** *Medical University of South Carolina (MUSC).*
 2016 **Anthony Zovich.** *Federal Law Enforcement Training Center (FLETC).*
 2015 **Bryce Ayres.** *BoomTown ROI.*
 2015 **Ike Clinton.** *Scitor Corporation.*

Grants and Awards

Awarded External Grants

GenCyber 2024: Cybersecurity Inter-disciplinary training Camp for Middle/High School Students. P.I. Shankar Banik. Key Personnel: Jennifer Albert, Antara Mukherjee, Jordana Navarro, **M. Verdicchio.** NSF/NSA. (\$149k)

CyberCorps® Scholarship for Service (SFS) grant from NSF/OPM (Solicitation 19-521). P.I. Shankar Banik. Co-PIs: Jennifer Albert, Carl Jensen, Jordana Navarro, **M. Verdicchio.** (\$2.8M)

GenCyber 2023: Cybersecurity Inter-disciplinary training Camp for Middle/High School Students. P.I. Shankar Banik. Key Personnel: Jennifer Albert, Antara Mukherjee, Jordana Navarro, **M. Verdicchio.** NSF/NSA. (\$133k)

GenCyber 2022: Cybersecurity Inter-disciplinary training Camp for Middle/High School Students. P.I. Shankar Banik. Key Personnel: Jennifer Albert, Antara Mukherjee, Jordana Navarro, **M. Verdicchio.** NSF/NSA. (\$144k)

GenCyber 2020: Codesmashers: Cybersecurity Inter-disciplinary training Camp for Middle/High School Students. P.I. Shankar Banik. Key Personnel: Jennifer Albert, Antara Mukherjee, Jordana Navarro, **M. Verdicchio.** NSF/NSA. (\$100k)

GenCyber 2019: Girls who Smash Codes: Cybersecurity Inter-disciplinary training Camp for Middle/High School Girls. P.I. Shankar Banik. Key Personnel: Jennifer Albert, Antara Mukherjee, Jordana Navarro, **M. Verdicchio.** NSF/NSA. (\$67,872)

National Science Foundation (NSF) Travel Stipend for iPDC Workshop on Integrating Parallel and Distributed Computing into Introductory Programming Courses, June 20–21, 2016, Tennessee Tech University (\$2,000)

XSEDE High Performance Computing Resource Allocation (1TB, 100K SUs), 2014–2015

Pacific Symposium on Biocomputing Travel Award, NLM/NIH, January 2011

NSF Travel Fellowship for Rocky 2008 Bioinformatics Conference

Awarded Citadel Grants

Office of the Provost: Professional Officers Funding (\$2,000), 2025–2026

Citadel Foundation Faculty Research Grant x13 (\$38,914 total), 2011–2025

Citadel Foundation Faculty Development/Presentation Grant x13 (\$28,725 total), 2011–2025

Citadel Summer Undergraduate Research Experience (SURE) x3 (\$9,000), 2017, 2019

School of Science and Mathematics Undergraduate Summer Research Grant (\$11,700), 2013

School of Science and Mathematics Undergraduate Summer Research Travel Grants (\$1385), 2013

Awarded by Arizona State University

University Graduate Fellowship, Arizona State University, summer 2011

Arizona State University Graduate College Conference Travel Grant, January 2011

Arizona State University Graduate Fellowship Award, summer 2009

Graduate and Professional Student Association (GPSA) Conference Travel Grant award, RECOMB 2009

In Development

NSF 25-514: NSF Scholarships in Science, Technology, Engineering, and Mathematics Program (S-STEM)

Submitted

GenCyber 2019: Codesmashers: Cybersecurity Inter-disciplinary training Camp for Middle/High School Students. P.I. Shankar Banik. Key Personnel: Jennifer Albert, Antara Mukherjee, Jordana Navarro, **M. Verdicchio**. NSF/NSA. (\$67,872)

Banik, S. (PI), Joshi, D., **M. Verdicchio**, National Science Foundation (NSF 15-584), “Embedding Cybersecurity Concepts throughout Undergraduate Computer Science Curriculum” (2017)

M. Verdicchio (PI) (\$9,500), National Institute of Standards and Technology (2017-NIST-SURF-01), “Summer Undergraduate Research Fellowship (SURF) Program: SURF operating on the Gaithersburg, Maryland campus (SURF Gaithersburg)”

Banik, S. (PI), Joshi, D., **M. Verdicchio** (\$73,584), National Institute of Standards and Technology (2016-NIST-SSCD-01), “Embedding Cybersecurity Concepts throughout Undergraduate Computer Science Curriculum”

REU Site: “Data Driven Network Analysis”, National Science Foundation, 2013. Collaborative Proposal with Deepti Joshi (The Citadel), and Shankar Banik (The Citadel)

REU Site: “Applied Research in Informatics and Security”, National Science Foundation, 2012. Collaborative Proposal with Paul Anderson (College of Charleston), Deepti Joshi (The Citadel), and Shankar Banik (The Citadel)

Academic Service

Serving the Profession

2023-	Program committee member, SIGCSE Technical Symposium
2023-	ABET Program Evaluator (PEV), CAC/CSAB
2026	Organizing committee, student volunteers co-chair, SIGCSE Technical Symposium
2025, 2017	Program committee member, Consortium for Computing Sciences in Colleges Southeastern Conference
2022	Program committee member, Jack Voltaic 3.0 Conference on Cyber Resiliency for Critical Infrastructure
2018	Panel session chair, Citadel Intelligence and Cybersecurity Conference, Charleston, SC, Sep. 25-26
2017	Contest Judge and problem contributor for Mercer University Spring Programming Competition, Feb. 25
2014	Contest Judge and problem contributor for 21st Annual Southeastern Small College Programming Contest, Nov. 8
2012	Contest Judge for 19th Annual Southeastern Small College Programming Contest, Nov. 3

Serving the College

2019-	Member, Graduate Curriculum Committee
2025-	Member, Faculty Sabbaticals Committee
2021-2025	Member, Faculty Senate
2022-2025	Chair, Graduate Curriculum Committee
2024-2025	Member, Graduate Programs Taskforce (provost)
2012-2024	Senior Leadership Integration Seminar (LDRS 411) Facilitator, The Krause Center
2022-2023	Member, Faculty Tenure and Promotions Committee
2019-2023	Member, Commencement Committee (provost)
2023	Member, Search Committee for Associate Provost for Teaching and Learning
2019-2021	Member, Undergraduate Curriculum Committee
2021	Member, Search Committee for Director of General Education
2016-2019	Member, Campus Life Committee
2018-2019	Member, ad-hoc Committee on Quality of Life
2017-2018	Member, Online Evaluation of Instruction Committee, School of Science and Mathematics
2018	Panel Facilitator, Careers in Cybersecurity: Government, Industry, Citadel Intelligence and Cybersecurity Conference
2018	Panel Facilitator, Cybersecurity Internship Success Stories, Citadel Leadership Symposium
2017	Judge, Citadel Student Research Conference, March
2012-2016	Member, Evaluation of Instruction Committee
2014-2015	Faculty Fellow in Service Learning and Civic Engagement

Serving the Department

2011-	Member, Computer Science Curriculum Committee
2012-	Internship Director, Department of Cyber and Computer Sciences
2015-	Co-chair, Recruitment and Scholarship Committee
2016-	ABET Accreditation Lead, Computer Science B.S. Program
2016-	Chair, Computer Science Assessment Committee
2016-	Co-chair, Graduate Steering Committee for Joint M.S. Program
2017-	Member, Tenure and Promotion and Reappointment Review Committee

2017–2025–	Graduate Program Director for Joint M.S. Program
2018–2024	Chair, Computer Science Faculty Search Committee (also 2019, 2020, 2022, 2023)
2011–2018	Chair, Computer Science Curriculum Committee
2018	Faculty Appointee Tracking Progress on Computer Science Majors
2016–2017	Member, Computer Science Faculty Search Committee (also 2016, 2017)
	Member, Graduate Steering Committee for Joint M.S. Program

Serving Students

2022–2024	ACM club co-advisor
2011–2024	Programming team co-advisor with Dr. Shankar Banik
2015–2023	Faculty advisor to Charlie Company, South Carolina Corps of Cadets, The Citadel
2018	Interns and application development advisor, Assistive Communications Technologies, Bridges App

Serving the Community

2018–2025	Lead Instructor. <i>See awarded external grants.</i> We prepared eleven 1-week GenCyber summer camps for middle and high school students over this period, with funding from the NSA and NSF. The Lead Instructor is responsible for aligning all lesson plans with learning objectives, coordinating instructors, and delivering instruction. The work also involved coordinating instruction for ten pre- and post-camp in-person and virtual meetings. This work was paid.
2022–2023	Internship Mentor. Tekai Smiley, a junior at Charleston Collegiate School in Johns Island, SC, requested supervision for a year-long “internship” project for his high school. I met with him weekly and mentored him in his project to demonstrate cybersecurity risks in a robotic car he built from a Raspberry Pi device. This work was uncompensated.

Workshops and Professional Development Activities

Workshops/Tutorials

2025	<i>Mastering Microsoft AI Tools for Educators.</i> Cengage Computing Experience, Kansas City, MO, October 30
2024	<i>Providing Students with Standardized, Cloud-Based Programming Environments.</i> SIGCSE Technical Symposium, Portland, OR, March 22
2024	<i>Teaching with AI (GPT).</i> SIGCSE Technical Symposium, Portland, OR, March 20
2023	<i>Creating algorithmically generated questions: PrairieLearn.</i> SIGCSE Technical Symposium, Toronto, ON, Canada, March 17
2023	<i>Distributing, Collecting, and Autograding Assignments with GitHub Classroom.</i> SIGCSE Technical Symposium, Toronto, ON, Canada, March 17
2023	<i>Providing Students with Standardized, Cloud-Based Programming Environments.</i> SIGCSE Technical Symposium, Toronto, ON, Canada, March 15
2022	<i>18th SEI Software Engineering Educators Workshop.</i> Pittsburgh, PA (virtually), August 2–4
2022	<i>Teaching Distributed Computing Fundamentals using Raspberry Pi Clusters.</i> SIGCSE Technical Symposium, Providence, RI, March 2
2022	<i>Getting started with source code analysis for programming education research.</i> SIGCSE Technical Symposium, Providence, RI, March 4
2021	<i>Guided Inquiry Collaborative Learning in Cybersecurity,</i> Virtual, May 17–19
2020	<i>New CyberCorps SFS Schools Bootcamp,</i> Washington, DC, January 13–15
2019	<i>Blockchain 101, IBM.</i> 18th Annual Bio-IT World Conference and Expo, Boston, MA, April 16–18

2018	<i>15th SEI Software Engineering Educators Workshop</i> . Pittsburgh, PA, July 31–August 2
2018	<i>Self-Study Development Workshop</i> . ABET Symposium, San Diego, CA, April 11
2018	<i>Advanced Program Assessment Workshop</i> . ABET Symposium, San Diego, CA, April 14
2017	<i>Academy for Software Engineering Education and Training (ASEET) Teaching Agile Project Management Workshop</i> , November 9
2017	<i>Academy for Software Engineering Education and Training (ASEET) Software Architecture Educator's Workshop</i> , November 7
2017	<i>Modules for Integrating Cryptography in Introductory CS and Computer Security Courses</i> , SIGCSE, Seattle, WA, March 8–11
2016	<i>iPDC Workshop on Integrating Parallel and Distributed Computing into Introductory Programming Courses</i> , Tennessee Tech University, June 20–21 (NSF Travel Stipend Awarded)
2016	<i>CRcST-Security Knitting Kit: Ready to Use Teaching Resources to Embed Security Topics into Upper Division CS Courses</i> , SIGCSE Technical Symposium
2016	<i>Introducing Secure Coding in CS0, CS1, and CS2</i> , SIGCSE Technical Symposium
2016	<i>Programming Web Services on the Cloud with Node.js</i> , SIGCSE Technical Symposium
2015	<i>ASCE's ExCEED Teaching Workshop (2-day version) led by Dr. Ron Welch</i> , The Citadel, January
2014	<i>Integrating Software Testing into Programming Courses</i> , SIGCSE Technical Symposium, Atlanta, GA, March 5–9
2014	<i>The Absolute Beginner's Guide to JUnit in the Classroom</i> , SIGCSE Technical Symposium, Atlanta, GA, March 5–9
2014	<i>Learn Java in N Games</i> , SIGCSE Technical Symposium, Atlanta, GA, March 5–9

Conferences Attended

2025	<i>Cengage Computing Experience</i> , Kansas City, MO, USA, October 29–30
2025	<i>ABET Symposium</i> , San Diego, CA, USA, April 3–4
2025	<i>IEEE Conference on Software Engineering Education and Training (CSEE&T)</i> , Ottawa, ON, CA, April 28–29
2024	<i>ABET Symposium</i> , Tampa, FL, April 4–5
2024	<i>Technical Symposium for the ACM Special Interest Group on Computer Science Education (SIGCSE)</i> , Portland, OR, March 20–23
2023	<i>Technical Symposium for the ACM Special Interest Group on Computer Science Education (SIGCSE)</i> , Toronto, ON, Canada, March 15–18
2022	<i>Technical Symposium for the ACM Special Interest Group on Computer Science Education (SIGCSE)</i> , Providence, RI, March 2–5
2022	<i>GenCyber Meeting</i> , Arlington, VA, May 11–13
2022	<i>35th Annual Consortium for Computing Sciences in Colleges Southeastern Conference</i> , Bob Jones University, January 28–29
2021	<i>34th Annual Consortium for Computing Sciences in Colleges Southeastern Conference</i> , Virtual, January 22–23
2019	<i>GenCyber Meeting</i> , National Harbor, MD, September 26–27
2018	<i>ABET Symposium</i> , San Diego, CA, April 12–13
2017	<i>IEEE Conference on Software Engineering Education and Training (CSEE&T)</i> , Savannah, GA, November 7–9
2017	<i>Technical Symposium for the ACM Special Interest Group on Computer Science Education (SIGCSE)</i> , Seattle, WA, March 8–10
2016	<i>30th Annual Consortium for Computing Sciences in Colleges Southeastern Conference</i> , UNC Asheville, November 4–5
2016	<i>Technical Symposium for the ACM Special Interest Group on Computer Science Education (SIGCSE)</i> , Memphis, TN, March 2–5
2014	<i>28th Annual Consortium for Computing Sciences in Colleges Southeastern Conference</i> , The College of Charleston, November 8

2014	<i>Technical Symposium for the ACM Special Interest Group on Computer Science Education (SIGCSE), Atlanta, GA, March 5–9</i>
2013	<i>27th Annual Consortium for Computing Sciences in Colleges Southeastern Conference, Furman University, November 15–16</i>
2012	<i>26th Annual Consortium for Computing Sciences in Colleges Southeastern Conference, Southern Polytechnic State University, November 2–3</i>
2011	<i>25th Annual Consortium for Computing Sciences in Colleges Southeastern Conference, Furman University, November 11–12</i>

Training Completed

2023	<i>Program Evaluator Training, ABET, Baltimore, MD</i>
2016	<i>The Citadel Security Awareness Training Program</i>
2015	<i>Citadel Online Teaching Academy</i>
2012	<i>Darkness to Light – Stewards of Children: Adults Protecting Children from Sexual Abuse</i>
2008	<i>Preparing Future Faculty Program, Arizona State University</i>

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