Kevin Buffardi, Ph.D.

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Education

Ph.D. in Computer Science, Virginia Tech, June 2014
Dissertation: Modeling Student Software Testing Processes: Attitudes, Behaviors, Interventions, and Their Effects
Committee: Stephen H. Edwards, Manuel Perez-Quiñones, Eli Tilevich, Cliff Shaffer, Shelli Fowler

M.S. in Human-Computer Interaction, with Distinction. DePaul University
Project: Intelligent Tutoring System with Mixed-Language Interface Adviser: Peter Hastings

B.S. in Computer Science, Cum Laude with Honors. University of Mary Washington
Honors Paper: Algorithmically Generated Rudimentary Music Adviser: Karen Anewalt

Academic Experience

California State University, Chico

Full Professor, 2024—Present; Associate Professor, 2019-2024; Assistant Professor, 2014-2019
California State University—Chico, Computer Science Department

New Course Preparations:

- Research Methods in Computer Science (CSCI 693)
- Software Design and Maintenance (CSCI 630)
- Software Engineering (CSCI 630, before *Design and Maintenance* re-design)
- Software Testing and Quality Assurance (CSCI 530)
- Special Problems in Software Engineering (CSCI 499)
- Advanced Topics in Data Science (CSCI 485)
- Capstone for CSCI, CINS, and Data Science Certificate (CSCI/CINS 490)
- Usability Engineering (CSCI 431, CSCI 431W)
- Software Engineering (CSCI 430)
- Intro to Data Science (CSCI/MATH 385)
- Programming and Algorithms I (CSCI 111)
- Intro to Web Programming (CINS 110)

Program Development: Supplementary Authorizations for K-12 Computer Science Teachers
CSED subject matter area proposal, course designs, and preparations

- Exploring Computer Science (CSED 500)
- Computer Science Principles (CSED 501)
- Technology for Computer Science Education (CSED 510)
- Computing in Society (CSED 511)
- Software Design, Data Structures, and Algorithms (CSED 590)

Virginia Tech

Dean's Teaching Fellow 2009—2012, Graduate Teaching Assistant 2008—2009, 2012—2013
Virginia Tech, Computer Science Department

Instructor of Record:

- Software Design & Data Structures (CS 2114)
- Intro to Programming in Java (CS 1054)
- Intro to Programming in C (CS 1044)

Industry/Government Experience

User Experience Specialist 2006—2008, User Experience Analyst 2005—2006

User Centric LLC, Oakbrook Terrace, Illinois

- Lead user-centered design and evaluation studies
- Clients represent a variety of sectors including mobile, health care, web, etc.

Usability Lab Intern 2004

U.S. Census Bureau, Statistical Research Division, Suitland, Maryland

- Developed (Flash/ActionScript) educational games for elementary school-age children
- Assisted in website evaluation and eye tracking studies

Awards

- Outstanding Teaching Award (2024), Wang Excellence Award, California State University system-wide (across 23 campuses) award for excellence in teaching. *Nominated.*
- Outstanding Professor Award (2022-2023), California State University, Chico. Campus-wide award for continued excellence in research, teaching, and service.
- Global Perspectives Scholar, Global Perspectives Program—Switzerland, 2013
- Graduate Teaching Excellence Award, Virginia Tech, 2013
- Outstanding Graduate Teaching Assistant, Computer Science Dept., 2012
- Dean's Teaching Fellowship, College of Engineering, 2009—2012

Active Research Projects

Software Engineering Education Research (SEER Lab)

Tech Startup Model for Software Engineering and Entrepreneurship Collaboration

Software engineering students form partnerships with vendors and entrepreneurship students to deliver real products by combining contemporary Agile Development & Lean Startup methods

- NSF IUSE grant (#2337271 #2337270 #2337269, Awarded: $750,000, Co-PI, 2024—Present) *Collaborative Research: FRONTIERS: Fostering Software Engineering Competence through Valid, Reliable, and Practical Assessments of Individual Contributions to Team Projects*
- CSU GI 2025 grant (Awarded: $32,254, renewed 2020, 2021; Co-PI, 2019—2022) *Engineering Math and Projects Bootcamp to Improve Retention and Graduation Rates in Engineering and Computer Science*
- ECC Seed grant (Awarded: $5,000, PI): *Emergent Technology in Tech Startup Software Engineering Projects*
- RSCA grant (Awarded: $6,000, PI): *Formalizing the Interdisciplinary Tech Startup Model*
  - Interdisciplinary collaboration with Colleen Robb and David Rahn of Management Dept.
  - Supervised William Zamora as part of CSC2, who co-authored a paper

Adaptive Learning Technology and Inclusive Pedagogy for Computer Science

Developing personalized, adaptive educational tools and innovating inclusive pedagogy

- California Education Learning Lab (Awarded: $50,000, PI, 2024—2025) *Python 4 All*
- National Science Foundation, Broadening Participation in Computing (#2315883 Awarded: $299,912, PI, 2023—Present) *BPC-DP: Embedding Representation, Relevance, and Equity in a Personalized System of Instruction*
- California Education Learning Lab (Awarded: $100,000, PI, 2020—2022) *Coding Community: Inclusive Space for Programming Tutorials and Adaptive Learning*
- Department of Education American Rescue Plan Act Higher Education Emergency Relief Funds (Awarded: $36,834, PI, 2021—2022) *Coding Online Videos with Inclusive Demonstrations*
- Supervised Subhed Chavan (2021-2022), who co-authored 1 paper; Juan Aguirre-Ayala (2020) as part of Chico STEM Connections Collaborative Summer Undergraduate Research Program (SURP), who co-authored 1 paper; Pedro Valdivia (2017-2019) as part of SURP, who co-authored 3 papers; Destiny Rogers (2018) as part of CSC2, who co-authored 1 paper; Pratik Gundlupet Venkatesh (2016), who developed a prototype

Previous Research Projects

Course-Based Undergraduate Research Experience and Entrepreneurship (CURE-E)

Integrating research and authentic professional experiences in undergraduate courses

- NSF HSI (#1953751 Awarded: $2,200,001, Senior Personnel, 2020—2025) *STEM Course Transformation: Cultivating a Culture of Entrepreneurial Mindset and Undergraduate Research*
  - Design and adopt *Color Vision Project* research projects into CSCI 111
  - Faculty Lead, training faculty on CURE-E course development (2022-2025)

Localized Free and Open Source Software with Chico Open Source Consortium

Measuring the impact of software engineering students collaborating face-to-face with a community organization of software professionals on Free and Open Source Software projects.

- Produced open source project, BossyUI
- Supervised MS students, Priyanka Chordiya and Pooja Shende, who both graduated 2016
- Priyanka Chordiya presented a poster at AAAS conference on supervised research project

Graduate Research Assistant, Virginia Tech, 2010—2014

NSF TUES-Type I Award #1245589 *CodePractice: Developing Coding Skills Using Social and Adaptive Drill-and-Practice Exercises*

- Authored accepted NSF TUES proposal (Awarded $321,090, Research Assistant)
- Initiated development of minimum viable product website (https://codeworkout.cs.vt.edu/)

CloudSpace, Student Transition Engineering Program (STEP)

- Software Engineer for developing and documenting standardized open educational resources

Undergraduate Research Assistant, 2003

NSF Research Experience for Undergraduates, UMBC, Baltimore, Maryland

Peer-Reviewed Paper Publications

[45] **Kevin Buffardi** and Richert Wang. 2026. Student reflections on relating programming concepts to their lives in worked example videos. American Society for Engineering Education annual conference (ASEE '26), in press. (2026).

[44] Aditi More and **Kevin Buffardi**. 2026. Investigating the pareto principle in student software engineering team projects. Hawaii International Conference on System Sciences (HICSS '26). (2026). https://hdl.handle.net/10125/112287.

[43] Rahul Bijoor and **Kevin Buffardi**. 2025. GitDash: a data-driven dashboard for monitoring team progress in software engineering education. Journal of Computing Sciences in Colleges 41(1), 119–128. (2025).

[42] Richert Wang and **Kevin Buffardi**. 2025. Expanding applications of programming with peer-instructor video tutorials. Journal of Computing Sciences in Colleges 41(1), 33–43. (2025).

[41] **Kevin Buffardi**, Rahul Bijoor, Aviral Kumar Srivastava, Tamanjeet Kaur Sidhu, Shalavritha Mamunooru, and Aditi More. 2025. Chronicling consistency and parity of contributions to software engineering team projects. In Proceedings of the 30th ACM Conference on Innovation and Technology in Computer Science Education, Vol. 1 (ITiCSE 2025), ACM, 562–568. (2025). doi:10.1145/3724363.3729039.

[40] **Kevin Buffardi**, JoAna Brooks, and David Alexander. 2024. Designing a CURE for CS1. In Proceedings of the 2024 Conference on Innovation and Technology in Computer Science Education, Vol. 1 (ITiCSE 2024), ACM, 660–666. (2024). doi:10.1145/3649217.3653573.

[39] **Kevin Buffardi**. 2023. Cognitive reflection in software verification and testing. In 2023 IEEE/ACM 45th International Conference on Software Engineering: Software Engineering Education and Training (ICSE-SEET), Melbourne, Australia, pp. 1–10. (2023). doi:10.1109/ICSE-SEET58685.2023.00006.

[38] **Kevin Buffardi**. 2023. CodeVid Studio: coding videos with multimodal instruction. Journal of Computing Sciences in Colleges 38(10), 26–34. (2023).

[37] **Kevin Buffardi** and Richert Wang. 2022. Integrating videos with programming practice. In Proceedings of the 27th ACM Conference on Innovation and Technology in Computer Science Education, Vol. 1 (ITiCSE '22), ACM, 241–247. (2022). doi:10.1145/3502718.3524778.

[36] **Kevin Buffardi**, Elena Harris, and Richert Wang. 2022. Codewit.us: a platform for diverse perspectives in coding. In Proceedings of the 53rd ACM Technical Symposium on Computer Science Education, Vol. 1 (SIGCSE 2022), ACM, 780–786. (2022). doi:10.1145/3478431.3499398.

[35] Briana B. Morrison, Beth A. Quinn, Steven Bradley, **Kevin Buffardi**, Brian Harrington, Helen H. Hu, Maria Kallia, Fiona McNeill, Oluwakemi Ola, Miranda Parker, Jennifer Rosato, and Jane Waite. 2022. Evidence for teaching practices that broaden participation

for women in computing. In Proceedings of the 2021 Working Group Reports on Innovation and Technology in Computer Science Education (ITiCSE-WGR '21), ACM, 57–131. (2022). doi:10.1145/3502870.3506568.

[34] **Kevin Buffardi** and Subhed Chavan. 2021. Is programming relevant to CS1 students' interests? Journal of Computing Sciences in Colleges 37(1), 45–53. (2021).

[33] Z. Alavi, **K. Buffardi**, K. Zhang, K. Meehan, and W. R. Johnson. 2021. Redesigning a summer math and engineering bootcamp for virtual instruction during the COVID-19 pandemic. Paper presented at the 2021 ASEE Virtual Annual Conference. (2021). doi:10.18260/1-2--37646.

[32] **Kevin Buffardi** and Juan Aguirre-Ayala. 2021. Unit test smells and accuracy of software engineering student test suites. In Proceedings of the 26th ACM Conference on Innovation and Technology in Computer Science Education, Vol. 1 (ITiCSE '21), ACM, 234–240. (2021). doi:10.1145/3430665.3456328.

[31] M. Sabin, **K. Buffardi**, S. Larsén, and B. MacKellar. 2020. Panel: synergistic perspectives on collaborative learning with version control tools. In 2020 IEEE Frontiers in Education Conference (FIE), Uppsala, Sweden, pp. 1–4. (2020). doi:10.1109/FIE44824.2020.9273944.

[30] Z. Alavi, K. Meehan, **K. Buffardi**, W. R. Johnson, and J. Greene. 2020. Assessing a summer engineering math and projects bootcamp to improve retention and graduation rates in engineering and computer science. Paper presented at the 2020 ASEE Virtual Annual Conference. (2020). doi:10.18260/1-2--34172.

[29] **K. Buffardi** and D. Rahn. 2020. Fostering entrepreneurship in project-based software engineering courses. Paper presented at the 2020 ASEE Virtual Annual Conference; Best Teaching Paper, 3rd Place. (2020). doi:10.18260/1-2--34683.

[28] **Kevin Buffardi**. 2020. Assessing individual contributions to software engineering projects with git logs and user stories. In Proceedings of the 51st ACM Technical Symposium on Computer Science Education (SIGCSE '20), ACM, 650–656. (2020). doi:10.1145/3328778.3366948.

[27] Colleen C. Robb, David Rahn, and **Kevin Buffardi**. 2019. Bridging the gap: a model for interdisciplinary collaboration between entrepreneurship and software engineering students. Journal of Education for Business 95(5), 321–330. (2019). doi:10.1080/08832323.2019.1644275.

[26] **K. Buffardi** and P. Valdivia. 2019. The significance of positive verification in unit test assessment. Proceedings of the 52nd Hawaii International Conference on System Sciences (HICSS); Best Paper Nominee. (2019).

[25] **Kevin Buffardi**, Pedro Valdivia, and Destiny Rogers. 2019. Measuring unit test accuracy. In Proceedings of the 50th ACM Technical Symposium on Computer Science Education (SIGCSE '19), ACM, 578–584. (2019). doi:10.1145/3287324.3287351.

[24] **K. Buffardi** and P. Valdivia. 2018. Bug hide-and-seek: an educational game for investigating verification accuracy in software tests. In 2018 IEEE Frontiers in Education Conference (FIE), San Jose, California, USA, pp. 1–8. (2018). doi:10.1109/FIE.2018.8658748.

[23] **K. Buffardi**. 2018. Tech startup learning activities: a formative evaluation. In 2018 IEEE/ACM International Workshop on Software Engineering Education for Millennials (SEEM), Gothenburg, Sweden, pp. 24–31; Best Paper Runner-Up. (2018).

[22] **K. Buffardi**, W. Zamora, C. Robb, and D. Rahn. 2018. Implementing the tech startup model: a retrospective on year one. In 2018 ASEE Annual Conference & Exposition. (2018).

[21] **Kevin Buffardi**. 2017. Comparing remote and co-located interaction in free and open source software engineering projects. In Proceedings of the 2017 ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE '17), ACM, 22–27. (2017). doi:10.1145/3059009.3059019.

[20] **Kevin Buffardi**, Colleen Robb, and David Rahn. 2017. Learning agile with tech startup software engineering projects. In Proceedings of the 2017 ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE '17), ACM, 28–33. (2017). doi:10.1145/3059009.3059063.

[19] **Kevin Buffardi**, Colleen Robb, and David Rahn. 2017. Tech startups: realistic software engineering projects with interdisciplinary collaboration. Journal of Computing Sciences in Colleges 32(4), 93–98. (2017).

[18] Colleen Robb, David Rahn, and **Kevin Buffardi**. 2017. Tech startups: a model for realistic entrepreneurship and software engineering project collaboration. United States Association for Small Business and Entrepreneurship Conference Proceedings, 1280–. (2017).

[17] Christian Murphy, **Kevin Buffardi**, Josh Dehlinger, Lynn Lambert, and Nanette Veilleux. 2017. Community engagement with free and open source software. In Proceedings of the 2017 ACM SIGCSE Technical Symposium on Computer Science Education (SIGCSE '17), ACM, 669–670. (2017). doi:10.1145/3017680.3017682.

[16] G. Karnik, K. Goto, B. Seipel, S. Pierson, J. Giampaoli, and **K. Buffardi**. 2016. Factors associated with cue-elicited food craving among elementary school children. Journal of Nutrition Education and Behavior 48(7), S49. (2016).

[15] S. Pierson, K. Goto, J. Giampaoli, A. Wylie, B. Seipel, and **K. Buffardi**. 2016. The development of a mindful-eating intervention program among third through fifth grade elementary school children and their parents. California Journal of Health Promotion 14(3). (2016).

[14] **K. Buffardi**. 2016. Localized open source software projects: exploring realism and motivation. In 2016 11th International Conference on Computer Science & Education (ICCSE), Nagoya, Japan, pp. 382–387. (2016). doi:10.1109/ICCSE.2016.7581611.

[13] **K. Buffardi**. 2015. Localized open source collaboration in software engineering education. In 2015 IEEE Frontiers in Education Conference (FIE), El Paso, Texas, USA, pp. 1–5. (2015). doi:10.1109/FIE.2015.7344142.

[12] **Kevin Buffardi** and Stephen H. Edwards. 2015. Reconsidering automated feedback: a test-driven approach. In Proceedings of the 46th ACM Technical Symposium on Computer Science Education (SIGCSE '15), ACM, 416–420. (2015). doi:10.1145/2676723.2677313.

[11] **Kevin Buffardi** and Stephen H. Edwards. 2014. Responses to adaptive feedback for software testing. In Proceedings of the 2014 Conference on Innovation and Technology in Computer Science Education (ITiCSE '14), ACM, 165–170. (2014). doi:10.1145/2591708.2591756.

[10] **Kevin Buffardi** and Stephen H. Edwards. 2014. A formative study of influences on student testing behaviors. In Proceedings of the 45th ACM Technical Symposium on Computer Science Education (SIGCSE '14), ACM, 597–602. (2014). doi:10.1145/2538862.2538982.

[9] **Kevin Buffardi** and Stephen H. Edwards. 2013. Effective and ineffective software testing behaviors by novice programmers. In Proceedings of the Ninth International ACM Conference on International Computing Education Research (ICER '13), ACM, 83–90. (2013). doi:10.1145/2493394.2493406.

[8] **Kevin Buffardi** and Stephen H. Edwards. 2013. Impacts of adaptive feedback on teaching test-driven development. In Proceedings of the 44th ACM Technical Symposium on Computer Science Education (SIGCSE '13), ACM, 293–298. (2013). doi:10.1145/2445196.2445287.

[7] **K. Buffardi** and S. H. Edwards. 2012. Impacts of teaching test-driven development to novice programmers. International Journal of Information and Computer Science 6(1). (2012).

[6] **Kevin Buffardi** and Stephen H. Edwards. 2012. Exploring influences on student adherence to test-driven development. In Proceedings of the 17th ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE '12), ACM, 105–110. (2012). doi:10.1145/2325296.2325324.

[5] **K. Buffardi**, D. Churbanau, et al. 2010. CoPractice: an adaptive and versatile practice tool. American Society of Engineering Education, Southeastern. (2010).

[4] **K. Buffardi**, A. Bojko, and E. Israelski. 2007. Tachistoscopic study on the impact of net quantity and dosage strength proximity on dosage strength recognition in prescription drug labels. Proceedings of the Human Factors and Ergonomics Society Annual Meeting 51(11), 730–734. (2007). doi:10.1177/154193120705101127.

[3] L. A. McFarlin, **K. J. Buffardi**, and R. M. Schumacher. 2007. Usability impact on effectiveness of parental controls. Proceedings of the Human Factors and Ergonomics Society Annual Meeting 51(17), 1039–1043. (2007). doi:10.1177/154193120705101709.

[2] A. Bojko, **K. Buffardi**, G. Lew, and E. Israelski. 2006. Eye tracking study on the impact of the manufacturer's logo and multilingual description on drug selection performance. Proceedings of the Human Factors and Ergonomics Society Annual Meeting 50(10), 1112–1116. (2006). doi:10.1177/154193120605001024.

[1] **Kevin Buffardi**. 2004. A model for rudimentary algorithmically generated music. DePaul CTI Research Symposium. (2004).

Posters & Presentations

[p12] Buffardi, K. & Wang, R. "Integrating Diverse Representation, Relevance, and Equity in K—12 Computing Classes." Presentation at Computer Science Teachers Association (CSTA) 2025.

[p11] Buffardi, K. "Thinking like a Tester." Guest Speaker, Computer Science Colloquium, University of California, Santa Barbara, 2024

[p10] Buffardi, K. "Codewit.us: A Platform for Diverse Perspectives in Coding" Invited Speaker at University of California, Davis, 2023

[p09] Buffardi, K. & Edwards, S.H. "Adaptive and Social Mechanisms for Automated Improvement of eLearning Materials." Poster at Learning at Scale, 2014

[p08] Buffardi, K. & Edwards, S.H. "Introducing CodeWorkout: An Adaptive and Social Learning Environment." Poster at SIGCSE, 2014

[p07] Buffardi, K. & Edwards, S.H. "Toward Effectively Reinforcing Test-Driven Development." Test-driven development panel, SPLASH-E, 2013

[p06] Buffardi, K. & Edwards, S.H. "Adaptive, Automated Feedback for Encouraging Adherence to Methods." Poster at Conf. on Higher Education Pedagogy, 2013

[p05] Buffardi, K., "Transforming Laboratories: Can Active Classrooms Replace Closed Laboratories? Lightning Talk", ICER, 2012

[p04] Buffardi, K., "Understanding and Persuading Adherence to Test-Driven Development." Doctoral Consortium, ICER, 2012

[p03] Buffardi, K., Edwards, S.H., "Student Adherence to Test-First Programming in the Classroom." Student Research Competition (3rd Place), SIGCSE, 2012

[p02] Buffardi, K., Churbanau, D., Jayaraman, R.K.N., & Edwards, S.H. "Practice Makes Perfect with CoPractice." Poster at SIGCSE. March, 2010

[p01] Pedersen, E., Buffardi, K., & Olson, H. "A Visual and Interactive Method to Elicit Participant Verbalization in Comparative Usability Tests." Presented at HFES, 2007

Scholarship

- Program Committee: International Conference on Software Engineering (ICSE-SEET), International Conference on Software Engineering Education and Training (CSEE&T), International Conference on the Foundations of Software Engineering (FSE)
- Invited NSF panelist: proposal reviewer for CISE directorate, 2017, 2022
- Associate Editor: PLOS One (2021—Present);
- Associate Editor: Frontiers in ICT, section on Digital Education (2021—2022)
- Associate Program Chair: ACM Technical Symposium on Computer Science Education (SIGCSE), ACM Innovation and Technology in Computing Education (ITiCSE)
- Reviewer ACM International Computer Education Research (ICER), ACM Transactions of Computing Education (TOCE), Journal on Empirical Software Engineering (EMSE), ACM DATA BASE for Advances in Information Systems (SIGMISDB), Computer Science Education, Taylor and Francis

Professional Development

- AI curriculum committee group chair, CSCI department, 2026
- Research and Sponsored Programs Grant Writing Bootcamp, Summer, 2018
- Hispanic Serving Institution (HSI) Faculty Learning Community, Spring, 2017
- rofessor's Open Source Software Experience (POSSE) Foss2Serve (http://foss2serve.org/) Professional development for instructors interested in student participation in Humanitarian Free and Open Source Software
- Participated in NSF-funded POSSE Workshop, Spring 2015
- Funded (awarded $4000) development of open source course description and series of educational materials for a module on software testing and quality assurance
- Collaborated and spoke as part of a peer-reviewed, five-person panel (SIGCSE 2017) on community engagement in open source projects
- NSF Grant Writing Workshop, attended in Portland, Oregon, 2016

Service

Department

- Adviser, Chico State Software Development Club, student club (2018—2019)
- Adviser, Computer Information Systems (CINS) academic adviser (2015—2024)
- Data Science Certificate (DSCI) academic adviser (2018—Present)
- Computer Science (CSCI) academic adviser (2024—Present)
- Masters thesis chair, Shelley Wong, *Exploring the Use of Software Visualization in Computer Science Education and Developing a System to Facilitate the Construction of Algorithm Visualizations with JSAV and WebAssembly* (defended Spring 2021)
- Masters thesis committee, Stevie Littleton, *A Deep Learning Framework for Predicting Adverse Drug Effects from Rat Transcriptomic Data: Foundations for Fair Multi-Omics Modeling* (Defending Spring 2026)
  Michael Gonsalves, *Evaluating the mobile development frameworks Flutter and Adobe Cordova and their impact on the development process and application performance* (Defended Fall 2018)
- Speaker, Information session to prevent plagiarism, ECC Graduate Student Welcome
- Chair, RTP Standards committee (2017—2021)
- Chair, Library committee (2016—Present)
- Scholarship committee (2015—Present)
- Curriculum committee (2014—2020)
- Department Chair Selection committee (2015—2016)
- Faculty Supervisor/Coach (2015)
- Faculty search committee (2014—2016)
- Lab committee (2014—2015)

College, University & Beyond

- RTP Committee, TECH, MECH/MECHA, CSCI (2020—2022)
- Associate Dean Search Committee (2020—2021)
- MMEM Personnel Committee (2020—2021)
- Faculty Marshall ECC Graduation Ceremony (2018—Present)
- ECC Scholarship committee (2016—Present), Chair (2023—Present)
- ECC Rawlings/Rotary Scholarship committee (2017—Present)
- ECC Commencement Ceremony, Department Commencement Message (Spring 2015)
- All University for Teacher Education Committee (AURTEC), ECC Representative (2022—Present)
- Advisory Board, NSF RITEL Grant: Critical Technology to Enable Innovative and Equitable Grading Practices (2026—Present)
- PhD Committee, Tianjia Wang, Virginia Tech (June 2025—Present)
- PhD Committee, Anas Abulfaraj, DePaul University: —Facilitating Heuristic Evaluation for Novice Evaluators— (Defended November, 2021)
- Academic Senate, College of ECC Senator (2019—2022)
- Educational Policies & Programs Committee, EPPC, (2019—2022)
- Lead Curriculum Developer, Computer Science Supplementary Authorization (2020—Present)
- Steering Committee, Math & Science Teaching Initiative, MSTI (2019—Present)
- Steering Committee & Academic Adviser, Data Science certificate (2018—Present)

- Mentor, International Friendship Program (2018—2019)
- Volunteer, March for Science-Chico (2017—2018)
- Faculty Marshall, Commencement (2016—Present)
- Co-founder, Chico Open Source Consortium (Fall 2014—2018)
- Mentor, First annual —Startup Weekend Chico— (2016)
- Director & Board Member, Active 20-30 Chico #100, (2016—2017),Volunteer, (2015—2017)

Professional Associations

- Association for Computing Machinery (ACM)
- ACM Special Interest Group in Computer Science Education (SIGCSE)
- American Society for Engineering Education (ASEE)
- Upsilon Pi Epsilon International Honor Society for the Computing and Information Disciplines
- Chi Beta Phi National Science Honorary, National Society of Collegiate Scholars