

Renée Cathryn Bryce

Office:	Web:
University of North Texas	http://www.cse.unt.edu/~reneebruce
Department of Computer Science & Engineering	renee.bryce@unt.edu
University of North Texas	
1155 Union Circle #311366	Citizenship: USA
Denton, Texas 76203-5017	

Research Interests

My main interests include (1) **Software Quality Assurance** with special emphasis on software testing processes that are cost-effective for web, GUI, and mobile applications and (2) **Software Testing Education**.

Degrees

Ph.D. in Computer Science (2002-2006) *Arizona State University, Tempe, AZ, USA.*

Dissertation: Algorithms for Covering Arrays

GPA: 4.0

Advisor: Professor Charles Colbourn

M.S. in Computer Science (1999-2000) *Rensselaer Polytechnic Institute, Troy NY, USA*

Advisor: Professor Ephraim Glinert.

B.S. in Computer Science (1996-1999) *Rensselaer Polytechnic Institute, Troy NY, USA*

Advisor: Professor Edwin Rogers.

Academic Experience

Fall 2018 - present: Professor at *University of North Texas, Computer Science & Engineering*

Fall 2012 - Summer 2018: Associate Professor at *University of North Texas, Computer Science & Engineering*

Fall 2008 - Summer 2012: Assistant Professor at *Utah State University, Computer Science*

Fall 2006 - Summer 2008: Assistant Professor at *University of Nevada Las Vegas, Computer Science*

Fall 2002 - Summer 2006: Lecturer at *Arizona State University, Computer Science & Engineering*

Refereed Journal Papers

* Student co-authors

J1. D. Adamo*, **R. Bryce**, Online Construction of Combinatorial-based Test Suites for Android Apps, submission to *Information and Software Technology Journal (IST, Elsevier)*, (July 2018), 99(7):98-117.

J2. D. Numuradov*, **R. Bryce**, Distance-Based Weighted Prioritization for GUI Application Testing, *Journal of Combinatorial Mathematics and Combinatorial Computing*, (August 2017), 102(3):77-98.

J3. L. Reynolds*, Q. Mayo*, D. Adamo*, **R. Bryce**, Improving Conceptual Understanding of Code with Bug Fixer, *Journal of Computing Sciences in Colleges, (JCSC, ACM)*, (December 2015), 31(2):87-94.

J4. S. Sampath, **R. Bryce**, A. Memon, A Uniform Representation of Hybrid Criteria for Regression Testing, *Transactions on Software Engineering, (TSE)*, (October 2013), 39(10):1326-1344.

J5. **R. Bryce**, C. Colbourn. Expected Time to Detection of Interaction Faults, *Journal of Combinatorial Mathematics and Combinatorial Computing*, 86 (2013), 87-110.

J6. S. Manchester*, **R. Bryce**, S. Sampath, N. Samant*, R. Kuhn and R. Kacker. Applying higher strength combinatorial criteria to test case prioritization: a case study, *Journal of Combinatorial Mathematics and Combinatorial Computing, (JCMCC)*, (August 2013), 86:51-72.

- J7.** S. Sampath, **R. Bryce**. Improving the effectiveness of test suite reduction for user-session-based testing of web applications, *Information and Software Technology Journal* (IST, Elsevier), (July 2012), 54(7):724-738.
- J8.** M. Hall*, K. Laughter*, J. Brown*, C. Day*, C. Thatcher*, **R. Bryce**. A Study of the Types of Programming Bugs that Introductory Students Request Help Solving. *Journal of Computing Sciences in Colleges*, (JCSC, ACM), (December 2012) 28(2):87-94.
- J9.** **R. Bryce**, S. Sampath, A. Memon. Developing a Single Model and Test Prioritization Strategies for Event-Driven Software, *Transactions on Software Engineering*, (January 2011), 37(1):48-64.
- J10.** **R. Bryce**, S. Sampath, J. Pedersen, S. Manchester*. Test Suite Prioritization by Cost-based Combinatorial Interaction Coverage, *International Journal on Systems Assurance Engineering and Management* (Springer, IJSAEM), (April 2011), 2(2): 126-134.
- J11.** S. Montiero*, **R. Bryce**. Code Inspections: A Web Crawler Exercise for Students, *Journal of Computing Sciences in Colleges* (JCSC, ACM), (December 2011), 27(2):67-77.
- J12.** **R. Bryce**. Bug Wars: A Competitive Exercise to Find Bugs in Code, *Journal of Computing Sciences in Colleges* (JCSC, ACM), (December 2011), 27(2):45-52.
- J13.** **R. Bryce**, C.J. Colbourn. A Density-Based Greedy Algorithm for Higher Strength Covering Arrays, *Journal of Software Testing, Verification and Reliability* (JSTVR, Wiley), (March 2009), 19(1):37-53. (Citeseer impact ranking of STVR: .36)
- J14.** L. Ran*, C. Dyreson, A. Andrews, **R. Bryce**, and C. Mallery*. Building Test Cases and Oracles to Automate the Testing of Web Database Applications, *Information and Software Technology Journal* (IST, Elsevier), (February 2009), 51(2):460-477.
- J15.** **R. Bryce**, C.J. Colbourn. The Density Algorithm for Pairwise Interaction Testing, *Journal of Software Testing, Verification and Reliability*, (JSTVR, Wiley), (August 2007), 17(3): 159-182. (Citeseer impact ranking of STVR: .36)
- J16.** **R. Bryce**, C.J. Colbourn, Y. Chen. Biased Covering Arrays for Progressive Ranking and Composition of Web Services, *International Journal Simulation and Process Modeling*, (IJSPM, InderScience), (July 2007), 3(1-2):80-87.
- J17.** **R. Bryce**, C.J. Colbourn. Prioritized Interaction Testing for Pairwise Coverage with Seeding and Avoids, *Information and Software Technology Journal* (IST, Elsevier), (October 2006), 48(10):960-970.

Refereed Conference Papers

- C1.** D. Adamo*, M. Khan*, S. Koppula*, **R. Bryce**. Reinforcement Learning for Android GUI Testing, *Proceedings of the Ninth Annual International Workshop for A-Test, co-located with ESEC/FSE 2018*, (2018), pages to appear.
- C2.** D. Madala*, S. Piparia*, H. Do, **R. Bryce**. Finding Component State Transition Model Elements using Neural Networks: An Empirical Study, *Proceedings of the Fifth International Workshop on Artificial Intelligence for Requirements Engineering*, (2018), pages to appear.
- C3.** D. Nurmuradov*, D., **R. Bryce**, S. Piparia*, B. Bryant. Clustering and Combinatorial Methods for Test Suite Prioritization of GUI and Web Applications, *Proceedings of the 15th International Conference on Information Technology - New Generations*, (2018), pp.459-466.
- C4.** D. Adamo*, **R. Bryce**. Randomized Event Sequence Generation Strategies for Automated Testing of Android Apps, *Proceedings of the International Conference on Information Technology: New Generations (ITNG)*, (2017), 571-578. * **Best Student Paper Award (Research Paper)**
- C5.** D. Nurmuradov*, **R. Bryce**, H. Do. Multilevel Course-to-Fine-Grained Prioritization for GUI and Web Applications, *Workshop on Automated Software Testing (A-TEST), co-located with the ACM SIGSOFT Symposium on the Foundations of Software Engineering (FSE)*, (2016), pp. 1-7.
- C6.** D. Bryce, M. Daum*, S. Shu, S*. Ariza*, V. Bundage*, **R. Bryce**. Combinatorial Branch Counting in Java PathFinder, *Proceedings of the Java Path Finder Workshop*, (2015), pp. 1-8.

- C7.** Q. Mayo*, R. Michaels*, **R. Bryce**. Test Suite Reduction by Combinatorial-based Coverage of Event Sequences, Proceedings of the International Workshop on Combinatorial Testing, Cleveland, OH, (2014), pp. 128-132.
- C8.** **R. Bryce**, Q. Mayo*, A. Andrews*, D. Bokser*, M. Burton*, C. Day*, J. Gonzalez*, T. Noble*. Bug Catcher: A System for Software Testing Competitions, Proceedings of SIGCSE, Denver, CO, (2013), pp. 513-518.
- C9.** D. Bryce, **R. Bryce**. Covering Landmark Interactions for Semantically Diverse Plans, AAAI Late-breaking papers, (2013), pp. 14-16.
- C10.** S. Sampath, **R. Bryce**, S. Jain*, S. Manchester*. A Tool for Combinatorial-based Prioritization and Reduction of User-Session-Based Test Suites, Proceedings of the International Conference on Software Maintenance (ICSM) Tool Demonstration Track, Williamsburg, VA, (2011), pp. 574-577.
- C11.** **R. Bryce**, C. Colbourn, D. R. Kuhn. Finding Interaction Faults Adaptively using Distance-Based Strategies. Proceedings of the International Conference on the Engineering of Computer Based Systems (ECBS), Las Vegas, NV, (2011), pp. 4-13.
- C12.** **R. Bryce**, A. Cooley*, A. Hansen*, N. Hayrapetyan*. A One Year Empirical Study of Student Programming Bugs. Proceedings of the Frontiers in Education Conference (FIE), Arlington, VA, (2010), pp. FIG-1-7.
- C13.** S. Sampath, **R. Bryce**, Gokulanand Viswanath*, Vani Kandimalla*, A. Gunes Koru. Prioritizing User-session-based Test Cases for Web Applications Testing. Proceedings of the International Conference on Software Testing, Verification, and Validation, Lillehammer, Norway, (2008), pp. 141-150.
- C14.** **R. Bryce**, A. Memon. Test Suite Prioritization by Interaction Coverage. Proceedings of the Domain-Specific Approaches to Software Test Automation (DoSTA) Workshop at ESEC/FSE 2007, Dubrovnik, Croatia, (2007), pp. 1-7.
- C15.** **R. Bryce**, C.J. Colbourn. One-Test-at-a-Time Heuristic Search for Interaction Test Suites. Proceedings of the Genetic and Evolutionary Computation Conference (GECCO), Search-based Software Engineering track (SBSE), London, England, (2007), pp. 1082-1089.
- C16.** **R. Bryce**, A. Rajan, M.P.E. Heimdahl. Interaction Testing in Model-Based Development: Effect on Model-Coverage, The 13th Asia-Pacific Software Engineering Conference (APSEC), Bangalore, India, (2006), pp. 258-269.
- C17.** **R. Bryce**, C.J. Colbourn, M.B. Cohen. A Framework of Greedy Methods for Constructing Interaction Tests. The 27th International Conference on Software Engineering (ICSE), St. Louis, Missouri. (2005), pp. 146-155. (13% acceptance rate) (Citeseer impact ranking of ICSE: 2.05)
- C18.** **R. Bryce**, C.J. Colbourn. Test Prioritization for Pairwise Coverage, ACM Proceedings of the 2005 workshop on Advances in model-based testing, St. Louis, MO (2005), pp. 1-7. *Invited to submit this work to a special issue of the Information and Software Technology Journal (IST, Elsevier)
- C19.** D. S. Hoskins, C.J. Colbourn, **R. Bryce**. Experimental Designs in Software Engineering: D-Optimal Designs and Covering Arrays, Proc. SIGSOFT 2004/Foundations on Software Engineering (FSE-12): Workshop on Interdisciplinary Software Engineering Research (WISER). Newport Beach, CA (2004), pp.55-66.
- C20.** C.J. Colbourn, M.B. Cohen, **R. Bryce**. A Deterministic Density Algorithm for Pairwise Interaction Coverage, Proceedings of the International Conference on Software Engineering (SE 2004). Innsbruck, Austria (2004), pp. 245-252.

Other papers

- D. Nurmuradov*, **R. Bryce**. Caret-HM: Recording and Replaying Android User Sessions with Heat Map Generation using UI State Clustering, ISSTA Demos Track, (July 2017), 400-403.
- A. Weaver, G. Byrd, **R. Bryce**. Computing Tools and Techniques for Emergency Response, IEEE Computer, (May 2016), 49(5): 16-18.
- A. Weaver, **R. Bryce**. Technological Advances in Medicine: It's Personal, IEEE Computer, (February 2015), 48(2): 21-23.

- Q. Mayo*, **R. Bryce**, R. Dantu. PhD Forum: A System Identification Approach to Monitoring Network Traffic Security, International Conference on Cyber Security and Cloud Computing (CSCloud), (November 2015), 509-511.
- R. Bryce**, R. Kuhn. Software Testing Guest Editors Introduction, IEEE Computer, (February 2014), 47(2):21-22.
- R. Bryce**. Automatic Generation of High Coverage Usability Tests, ACM CHI 2005, Extended Abstract Doctoral Symposium. Portland, Oregon (April 2005), pp.1108-1109.
- R. Bryce**. Constructing Interaction Test Suites with Greedy Algorithms, 20th IEEE/ACM International Conference on Automated Software Engineering (ASE05), Extended Abstract Doctoral Symposium. Long Beach, California, (November 2005), pp. 440-443.
- S. Sampath, **R. Bryce**, S. Jain, S. Manchester, D. R. Kuhn, R. Kacker. CPUT: Combinatorial-Based Prioritization for User-Session-Based Testing of Web Applications, VERIFY/ATI Conference, Presentation based on Accepted Abstract, Arlington, VA, September 2011.
- R. Bryce**, V. Allan. Mystery Bug Theater, Work-in-Progress paper in the Proceedings of the CS Conference on Software Engineering Education and Training (CSEE&T), Honolulu, HI, April 2011, pp. 381-385.

Book Chapters

- D. R. Kuhn, **R. Bryce**, F. Duan, L. Sh. Ghandehari, Y. Lei, R. Kacker. Elsevier, Book Chapter in Advances in Computers, editor Atif Memon, ISSN 0065-2458: Chapter One - Combinatorial Testing: Theory and Practice, 99(1):1-66.
- R. Bryce**, S. Sampath. Practical Combinatorial Testing by Kuhn, Kacker, and Lei, T&F/CRC Press, Chapter 7 on Test Suite Prioritization by Combinatorial Coverage, 2013, pp. 41-53.
- R. Bryce**, R. Kuhn, Y. Lei, R. Kacker. Handbook of Research on Software Engineering and Productivity Technologies: Implications of Globalization, Ramachandran, ed., IGI Global, 2009, Chapter 14: Combinatorial testing, August 2009, pp.196-208.

Funding

- F1. Metadata tools for public access to digital scientific data**, *U.S. Forest Service*. Award Total: \$80,000. PI: R. Bryce (100%). (Status: 8/2016 - 8/2019 with year 1 funds committed of \$80,000).
- F2. REU Site: Software Assurance and Security in Emerging Technologies: Research Experience for Undergraduates**, *National Science Foundation*. Award Total: \$359,983. PI: H. Takabi (50%), Co-PI: R. Bryce (50%). (Active: 2/1/18 - 1/31/21).
- F3. Model-based Testing Project***, *Ultimate Software, LLC*. Award Total: \$30,000. PI: R. Bryce (100%). (Active: 9/1/2016.) * This is a gift and not a grant that supported work in publications J0 and C1.
- F4. Enabling a Common Metadata Standard in Ecology**, *U.S. Forest Service*. Award Total: \$75,000. PI: R. Bryce (100%). (Active: 8/2015 - 8/2016).
- F5. REU Site: Secure Software Testing for Web and Mobile Applications**, *National Science Foundation*. Award Total: \$359,991. PI: R. Bryce (50%), Co-PI: Hassan Takabi (50%). (Active: 1/1/15 - 12/31/18).
- F6. CAP-Bugs: A Process to Capture, Analyze, and Prevent Bugs**, *National Science Foundation*. Award Total: \$184,650. PI: R. Bryce (100%). (Active: 1/15/2012 – 12/31/2013). (Funding rate: 11.8%).
- F7. REU Site: Bug Wars: A Collaborative Software Testing Research Experience for Undergraduates**, *National Science Foundation*. Award Total: \$315,990. PI: R. Bryce (50%), Co-PI: D. Bryce (50%). (Active: 3/1/2012 – 2/28/2015).
- F8. REU Site Supplement: Grace Hopper 2014 Travel Scholarships for REU Site students**, *National Science Foundation*. Award Total:\$29,988. PI: R. Bryce (100%). (Active: 2014).
- F9. REU Site Supplement: Grace Hopper 2013 Travel Scholarships for REU Site students**, *National Science Foundation*. Award Total:\$20,000. PI: R. Bryce (100%). (Active: 8/2013).
- F10. REU Site Supplement: Organization of the REU Sites Poster Session at the Grace Hopper Conference for Women in Computing**, *National Science Foundation*. Award Total: \$5,354. PI: R. Bryce (100%). (Active: 5/10/2013).

- F11. Combinatorial-based Techniques for Web Application Test Selection**, *National Institute of Standards and Technology*. Award Total:\$128,000. PI: R. Bryce (50%), Co-PI: S. Sampath (50%). (Active: 2/1/2010 – 1/31/2013).
- F12. Minimizing Access Disparities in Bio Emergency Response Planning**, *National Institutes of Health*. Award Total: \$807,687. PI: Armin Mikler, Co-PI: Tiwari, Co-PI: Schneider, Co-PI: R. Bryce (15%). (Active: 8/1/2013 - 7/31/2015). *My role as Co-PI is to assist with the Software Testing and Usability Testing of the system.*
- F13. An Empirical Study of Engaging Students Through Software Testing**, *Computing Research Association Women, Collaborative Research Experience for Undergraduates Program*. Award Total: \$13,500. PI: R. Bryce (100%). (Active: 8/2013 – 8/2014).
- F14. Developing Improved Metadata Software**, *U.S. Forest Service*. Award Total: \$210,000. PI: R. Bryce(100%). (Active: 8/2011– 8/2014)
- F15. University of North Texas STARS, STARS Alliance**. Award Total: \$21,000. PI: R. Bryce (100%). (Active: 8/2013 - 12/2015).
- F16. An Empirical Study of a Web-based Recommendation System to Help Students Avoid Programming Bugs**, *Computing Research Association Women, Collaborative Research Experience for Undergraduates Program*. Award Total: \$30,300. PI: R. Bryce (100%). (Active: 8/2012 – 8/2013).
- F17. Mystery Bug Theater**, *Computing Research Association Women, Collaborative Research Experience for Undergraduates Program*. Award Total: \$27,000. PI: R. Bryce(100%). (Active: 8/15/2011 – 8/15/2012).
- F18. A Study of Retention Issues for Female Computer Science Students at USU, USU Center for Women and Gender**. Award Total: \$500. PI: R. Bryce (100%). (Active: 12/1/2011 – 8/31/2012).
- F19. Test case selection and Statistical modeling of the behavior of the Ceph parallel file system**, *Lawrence Livermore National Lab*. Award Total: \$24,377. PI: R. Bryce (100%). (Active: 9/2010 – 8/14/2011)
- F20. An Algorithm for Cost-based Combinatorial Prioritization**, *Utah State Women and Gender Research Institute (WGRI)*. Award Total: \$500. PI: R. Bryce (100%). (Active: 11/15/10 – 5/31/11).
- F21. An Algorithm for Combinatorial-based Prioritization**, *Utah State Women and Gender Research Institute (WGRI)*. Award Total: \$500. PI: R. Bryce (100%). (Active: 10/15/09 – 5/31/10).
- F22. An Empirical Study of Bugs in Undergraduate Programming Assignments**, *Computing Research Association Women, Collaborative Research Experience for Undergraduates Program*. Award Total: \$23,600. PI: R. Bryce (100%). (Active: 8/15/2009 – 8/31/2010).
- F23. Tracking Student Bugs Across the Computer Science Curriculum**, *Utah State Women and Gender Research Institute*. Award Total: \$500. PI: R. Bryce (100%). (Active: 1/30/09 – 12/31/09).
- F24. Interagency Restoration Database**, *Department of Interior*. Award number 2360-268-7499. Award Total: \$300,000. PI: C. Palmer (20%), Co-PI: R. Bryce (40%), Co-PI: F. Nasoz (40%). (Active: 4/1/08 – 3/31/11).
- F25. A User Centric Metadata Interface for Preserving the Nations Ecological Data**, *UNLV Presidents Award*. Award Total: \$38,647. PI: F. Nasoz (34%), Co-PI: R. Bryce (33%), Co-PI: C. Palmer (33%). (Active: 2008 – 2009).

Teaching

University:Course No - Term - Course Title (Class size)

UNT: CSCE4444 - F18 **Software Engineering** (Class size: 52)

UNT: CSCE4444 - Sp18 **Software Engineering** (Class size: 61)

UNT: CSCE4444 - F17 **Software Engineering** (Class size: 36)

UNT: CSCE4444 - Sp17 *No class - I taught an extra course in Summer 13 to have a maternity leave this semester*

UNT: CSCE4444 - F16 **Software Engineering** (Class size: 37)

UNT:CSCE6420 - Sp16 - **Advanced Software Engineering** (Class size: 6)

UNT:CSCE4444 - F15 - **Software Engineering** (Class size: 55)

UNT:CSCE5420 - F15 - **Software Engineering** (Class size: 8)

UNT:CSCE4444 - Sp15 - **Software Engineering** (Class size: 26)
 UNT:CSCE5420 - Sp15 - **Software Engineering** (Class size: 4)
 UNT:CSCE4444 - F14 - **Software Engineering** (Class size: 40)
 UNT:CSCE5420 - Sp14 - **Software Engineering** (Class size: 3)
 UNT:CSCE4444 - F14 - **Software Engineering** (Class size: 27)
 UNT:CSCE5420 - Sp14 - **Software Engineering** (Class size: 3)
 UNT:CSCE4444 - Sp14 - **Software Engineering** (Class size: 25)
 UNT:CSCE5420 - Sp14 - **Software Engineering** (Class size: 2)
 UNT:CSCE4444 - F13 - **Software Engineering** (Class size: 20)
 UNT:CSCE5420 - F13 - **Software Engineering** (Class size: 3)
 UNT:CSCE5933 - Su13 - **Usability Testing** (Class size: 3)
 UNT:CSCE4930 - Su13 - **Usability Testing** (Class size: 7)
 UNT:CSCE5430 - Sp13 - **Algorithms for Software Testing** (Class size: 8)
 UNT:CSCE5420 - F12 - **Software Development** (Class size: 3)
 UNT:CSCE4444 - F12 - **Software Engineering** (Class size: 15)
 USU:CS3450 - Sp12 - **Software Engineering II** (Class size: 20)
 USU:CS6890 - Sp12 - **Algorithms for Software Testing** (Class size: 9)
 USU:CS3450 - F11 - **Software Engineering II** (Class size: 32)
 USU:CS5890 - Su11 - **Usability Testing** (Class size: 18)
 USU:CS3450 - F11 - **Software Engineering II** (Class size: 21)
 USU:CS3450 - Sp10 - **Software Engineering II** (Class size: 15)
 USU:CS5890 - Sp10 - **Software Testing** (Class size: 10)
 USU:CS3450 - F09 - **Software Engineering II** (Class size: 17)
 USU:CS5890 - Su09 - **Usability Testing** (Class size: 9)
 USU:CS 6890 - Sp09 - **Software Testing Research** (Class size: 5)
 UNLV:CS 472/672 - Sp08 - **Software Product Design I** (Class size: 14)
 UNLV:CS789 - F07 - **Software Testing** (Class size: 10)
 UNLV:CS472/672 - Sp07 - **Software Product Design I** (Class size: 11)
 UNLV:CS302 - F06 - **Data Structures** (Class size: 30)
 ASU:CSE210 - Sp06 - **OOP and Data Structures Using JAVA** (Sections A and B) (Class size: 85)
 ASU:CSE210 - F05 - **OOP and Data Structures Using JAVA** (Sections A and B) (Class size: 97),
 ASU:CSE360 - F05- **Intro. to Software Engineering** (Class size: 54)
 ASU:CSE463/598 - Su05 - **Intro. to HCI** (Class size: 40)
 ASU:CSE210 - F04 - **OOP and Data Structures Using JAVA** (Sections A and B) (Class size: 126)
 ASU:CSE360 - F04 - **Intro. to Software Engineering** (Class size: 53)
 ASU:CSE210 - Sp04 - **OOP and Data Structures Using JAVA** (Sections A and B) (Class size: 47)
 ASU:CSE360 - Sp04 - **Intro. to Software Engineering** (Class size: 58)
 ASU:CSE210 - F03 - **OOP and Data Structures Using JAVA** (Sections A and B) (Class size: 126)
 ASU:CSE360 - F03 - **Intro. to Software Engineering** (Class size: 72)
 ASU:CSE494/598 - Su03 - **Intro. to HCI** (Class size: 49)
 ASU:CSE185 - Sp03 - **Internet and the WWW** (Class size: 112)
 ASU:CSE210 - Sp03 - **OOP and Data Structures Using JAVA** (Class size: 23)
 ASU:CSE360 - Sp03 - **Intro. to Software Engineering** (Class size: 62)
 ASU:CSE185 - F02 - **Internet and the World Wide Web** (Class size: 112)
 ASU:CSE210 - F02 - **OOP and Data Structures Using JAVA** (Class size: 26)

ASU:CSE494/598 - F02 -**Intro. to HCI** (Class size: 42)

ASU:CSE494/598 - Su02 - **Intro. to HCI** (Class size: 48)

ASU:CSE210 - Sp02 - **OOP and Data Structures Using JAVA** (Class size: 52)

ASU:CSE 210 F01 - **OOP and Data Structures Using JAVA** (Class size: 45)

PhD Students Advised

David Adamo -(Ph.D., UNT) graduated in August 2017 *Best Student Paper Award at ITNG Conference

Dmitry Nurmuradov - graduated in December 2017

Quentin Mayo - anticipated graduation Fall 2018

Ryan Michaels - anticipated graduation Fall 2018 * Outstanding Teaching Fellow Award (We co-taught and I mentored him when he taught his own courses)

Shraddha Piparia - anticipated graduation May 2021

Md. Khorrom Khan - anticipated graduation in May 2022

Surya Pasumarthi - anticipated graduation in May 2023

MS Students Advised

Sreedevi Koppulla (M.S. Thesis, UNT) 2017 * UNT CSE Department Outstanding MS Student award and UNT 3 Minute Thesis People's Choice Award

Naveen Tula (M.S. Thesis, UNT) 2016

Lisa Reynolds (M.S. Thesis, UNT) 2015

Schuyler Manchester (M.S. Thesis, USU) 2012 * Best Thesis Award

Chad Maughan (M.S. Thesis, USU) 2012

Nazneen Malik (M.S. Project, USU) 2010

Jared Mygrant (M.S. Project, USU) 2010

Vani Kandimalla (M.S. Thesis, UNLV) 2008

Student Awards

(2017) David Adamo - Best Student Paper Award for the category of Research Papers at the ITNG Conference

(2017) Sreedevi Koppulla - Outstanding MS Student Award from the Computer Science and Engineering department at University of North Texas

(2017) Sreedevi Koppulla - People's Choice Award Winner for the University of North Texas 3 Minute Thesis Competition

(2012) Schuyler Manchester - Best Thesis Award from the Computer Science Department at Utah State University; Currently works at Google and is part of the Google in Residence Program at University of Texas at El Paso and teaches CS1 sections for Fall 2018

(2012) Amy Hansen - Best Honors Thesis Award from Utah State University (only one award per year for the entire university)

(2011) Nare Hayrapetyan - First place for the Science, Technology and Engineering category at the USU Center for Women and Gender Celebration: Student Showcase for Women's History Month

(2010) Nazneen Malik - Won 3rd place in the 'Science' category at the Intermountain Graduate Research Competition; Currently works at Microsoft

Professional Service

- (2019) PC member for the International Conference on Software Testing, Verification and Validation (ICST 2019)
- (2018-19) Co-Chair of the UNT CSE PAC to oversee Tenure and Promotion cases and Annual Reviews for all CSE faculty members (nominated and voted by faculty; there is a two-year time limited as PAC chair, so I took one year off in 2017-18)
- (2018) PC member for the International Conference on Software Engineering (ICSE 2018)
- (2017) PC member for the IEEE Software Technology Conference (STC 2017)
- (2017) Co-Chair of the Awards Committee for the International Conference on Software Testing, Verification and Validation (ICST 2017)
- (2017) PC for the International Workshop on Combinatorial Testing (IWCT 2017)
- (2016-17) Co-Chair of the UNT CSE PAC to oversee Tenure and Promotion cases and Annual Reviews for all CSE faculty members (nominated and voted by faculty)
- (2015-16) Co-Chair of the International Conference on Software Engineering (ICSE) Student Research Competition (ICSE 2015 Student Research Competition)
- (2015-16) Co-Chair of NSF REU PI Planning Meeting
- (2015-16) Chair of UNT CSE PAC to oversee Tenure and Promotion cases and Annual Reviews for all CSE faculty members (nominated and voted by faculty)
- 2015) PC member for the SAC Software Engineering Track
- 2015) PC member for ISADS
- (2014-15) Co-Guest Editor of the IEEE Computer Special Issue on Emergency Response with Alf Weaver and Greg Byrd (Published 2016)
- (2014-15) Co-Guest Editor of the IEEE Computer Special Issue on Computational Medicine with Alf Weaver (Published 2015)
- (2013-14) Co-Guest Editor of the IEEE Computer Special Issue on Software Testing with Rick Kuhn (Published 2014)
- (2012 - present) Software Area Editor for IEEE Computer
- (2013-2014) Co-Chair of the Software Engineering Track at the Grace Hopper Conference (GHC 2014)
- (2013,2014) Organizer of the NSF REU Site Cohort of 11 students presenting posters at the Grace Hopper Conference for Women in Computing (GHC 2013, GHC 2014)
- (2012 - present) Faculty Advisor for UNT ACM organization
- (2014) Leader for the Foundations on Software Engineering Research Breakout Group at the NSF REU PI Meeting
- (2014) Reviewer for Journal of Computer Science and Technology
- (2012 - present) Faculty Advisor for UNT ACMW organization
- (2014 - present) UNT CSE Student Awards Committee
- 2013-2014) UNT CSE Colloquium Organizer
- (2013) Faculty Advisor for UNT IEEE organization (Fall semester while their faculty advisor was on sabbatical)
- (2013) Program Committee for the International Symposium on Software Reliability Engineering (ISSRE).
- (2013) Program Committee for Student Papers at the International Symposium on Software Reliability Engineering (ISSRE).
- (2012 - 2014) Program Committee for the First Workshop on Combinatorial Testing (CT 2012, 2013, 2014).
- (2010-2012) Technical Program Committee for the International Conference on Software Testing, Verification and Validation (ICST 2011, ICST 2012, ICST 2013)
- (2012) Ph.D. Symposium Co-Chair for the Grace Hopper Conference for Women in Computing (GHC 2012)
- (2012 - 2014) Evaluator for the ACM Student Research Competition Grand Finals (ACM SRC Grand Finals 2012, 2013, 2014)
- (2012) Australian Journal of Combinatorics, Reviewer.

- (2011) Posters Co-Chair for the Grace Hopper Conference for Women in Computing (GHC 2011)
- (2010-2011) Co-Chair for the NCWIT Academic Alliance Student Leadership Fund Team to solicit, review, and award funds to student organizations.
- (2010) Journal of Empirical Software Engineering, Reviewer.
- (2010) Journal of Discrete Applied Mathematics, Reviewer.
- (2010) Journal of Systems and Software, Reviewer
- (2010) NCWIT Aspirations in Computing Scholarships for High School Females, Reviewer.
- (2009-2010, 2014-2015) Technical Program Committee for the International Workshop on Testing Techniques and Experimentation Benchmarks for Event-Driven Software (TESTBEDS)
- (2009-2012) Technical Program Committee for the International Workshop on Assurance in Distributed Systems and Networks (ADSN 2009, ADSN 2010, ADSN 2012)
- (2011-2013) Technical Program Committee for the International Symposium on Autonomous Decentralized Systems (ISADS 2011, 2013, 2014)
- (2009) Journal on Software Testing, Verification, and Reliability, Reviewer
- (2009) ACM Computing Surveys, Reviewer
- (2007 - 2010) Technical Program Committee for the International Workshop on Assurance in Distributed Systems and Networks (ADSN 2009, ADSN 2010)
- (2008-2009) Technical Program Committee for the International Conference on Software Testing, Verification and Validation (ICST 2009)
- (2008 - 2010) Technical Program Committee for the International Workshop on Testing Techniques and Experimentation Benchmarks for Event-Driven Software (TESTBEDS 2009, TESTBEDS 2010)
- (Oct. 2008) Grace Hopper Conference for Women in Computing, Panel, What is a PhD Really Good For?: Thoughts from New(er) Grads, Jennifer Beckmann, Microsoft; Rene Bryce, Utah State University; Ariadna Font-Llitjs, Vivsimo; Kathrin Probst, Accenture; Stefanie Tomko, Microsoft; Laura Tomokiyo, Carnegie Mellon University.
- (2008, 2009) Grace Hopper Conference for Women in Computing, Poster Judge
- (Sep. 2008) Aggie Family Day, Computer Science Table, Exercise for Children, Code Cracking.
- (2008) Journal on Software Testing, Verification and Reliability, Reviewer
- (2007, 2008, 2012) SIGCSE, Reviewer
- (Oct. 2008) Handbook of Software Engineering Research and Productivity Technologies: Implications of Globalisation, Reviewer
- (2007) NSF Panel Review
- (2006) Faculty Advisor for ASU Women in Computer Science at ASU, Tempe, AZ (2002-2006)
- (2006) Faculty Advisor for the Annual Programming Competition at ASU, Tempe, AZ (2003-2006)
- (2005) CSE/Motorola Intern Mentor at ASU, Tempe, AZ (2002-2005)
- (2004) McGraw Hills Data Structure Symposium, Chicago, IL (June 2004)
- (2004) Imagine Cup Judge for the Windows Interest Group at ASU, Tempe, AZ (March 2004)
- (2004) Faculty Advisor for Women in Science & Engineering Investments Program (2001-2004)
- (2003) Faculty Advisor for ASU American Indian Science & Engineering Society (AISES) Summer Camp for High School Students (June 2003)
- (2003) Judge at the Central Arizona Regional Science & Engineering Fair for Mathematics and Computer Science (April 2003)

Honors and Awards

- (2018) Tech Titans Finalist for the Category of Tech Titans of the Future - University Level Award, (Finalists made it through the application and interview process. There are 5 finalists and the winner of the award and \$25,000 prize will be announced at the gala on August 24, 2018)*
- (2015) NCWIT Undergraduate Research Mentor Award for the Category of Junior Faculty (Assistant/Associate level) at a Research University, including a \$5,000 prize*
- (2012) USU Undergraduate Research Mentor of the Year for the College of Engineering*
- (2012) Faculty Advisor to the recipient of the USU Best Honors Thesis Award for Amy Hansens Honors Thesis titled, An Empirical Study of Student Programming Bugs*
- (2006) Arizona State Commission on the Status of Women Award for achievement and contribution towards advancing the status of women*
- (2006) CRA-W Scholarship to attend the CRA-W Career Mentoring Workshop. (Washington, D.C.)*
- (2004) ASU W.I.S.E. (Women in Science and Engineering) Investments Award (2002-2004)*
- (2003) ASU AISES (American Indian Science & Engineering Society) Award for contributions to their summer camp program for high school students*
- (2003) Keynote speaker for the ASU W.I.S.E. Investments annual banquet Talk A Scrapbook from Science & Engineering*
- (2003) Speaker at American Indian Institute at ASU for students interested in engineering majors*
- (2002) Keynote speaker for the ASU W.I.S.E. annual banquet*
- (1999) Stanley I. Landgraf Prize annual prize for the Computer Science undergraduate student who excelled in leadership skills and academic achievement. As an undergraduate, I earned my degree in 2 years and 9 months; received special permission to take graduate level courses as an undergrad; and served as a student representative on the Computer Science Undergraduate Program Committee.*

August, 2018