



Nic Herndon

Associate Professor & Graduate Program Director  
Department of Computer Science  
East Carolina University  
Greenville, NC 27858  
✉ herndonn19@ecu.edu  
🌐 <https://myweb.ecu.edu/herndonn19/>

## Research Interests

Artificial Intelligence, Machine Learning, Natural Language Processing, Big Data Analytics/Data Science, Computational Biology, and Bioinformatics

## Education

- JUL 25, 2016 - **Postdoctoral Research Associate**, University of Connecticut, Storrs, CT  
AUG 31, 2018 Lead developer for CartograTree (cartogratree.org), an open repository and open-source analytic framework for genomic, phenotypic, and environmental data for forest trees  
Advisor: Jill Wegrzyn
- MAY 13, 2016 **Doctor of Philosophy, Computer Science**, Kansas State University, Manhattan, KS  
Thesis: *Domain Adaptation Algorithms for Biological Sequence Classification*  
Advisor: Doina Caragea
- AUG 15, 2008 **Master of Science, Computer Science**, University of Nevada at Reno, Reno, NV  
Thesis: *ATTITUDE: A Tidy Touchscreen Interface to a UML Development Environment*  
Advisor: Sergiu Dascalu

## Academic Work

- AUG 16, 2024 - **Associate Professor**  
PRESENT Department of Computer Science, East Carolina University.
- AUG 12, 2019 - **Assistant Professor**  
AUG 15, 2024 Department of Computer Science, East Carolina University.
- SEP 1, 2018 - **Teaching Fellow**  
AUG 31, 2019 College of Information and Computer Sciences, University of Massachusetts Amherst.

## Grants

- JUN 1, 2024 - **DoD: ATO Conversations with AI to Stream and Visualize Civil Knowledge (AI CIVILIZE SKILLS)**, PI Nic Herndon, Co-PI David Hart, and Co-PI Qin Ding, \$500K.
- JUL 1, 2023 - **DoD: Conversations with AI to Stream and Visualize Civil Knowledge (AI CIVILIZE SKILLS)**, PI Nic Herndon and Co-PI Qin Ding, \$308K.
- 2021 - 2024 **NSF: REU Site: Software and Data Analytics**, PI Nasseh Tabrizi and Co-PI Nic Herndon, \$381K.
- 2017 - 2022 **NSF: IUUSE/PFE:RED: PPSE - Transforming Programmers to Professional Software Engineers through Curricular Innovation, Inclusive Pedagogy, and Faculty Development**, PI Venkat Gudivada, Co-PI Marjorie Ringler, Co-PI Mark Hills, Co-PI Qin Ding, and Co-PI Nic Herndon, \$2M.

2019 - 2022 **USDA: Fact: Enabling Association Mapping And Landscape Genomics Through The Advanced Integration Of Genotype, Phenotype, And Geospatial Data**, PI Jill Wegrzyn, Co-PI **Nic Herndon**, and Co-PI Meg Staton, \$500K.

---

## Publications

### Peer-reviewed Journal Articles

16. Vilkomir, K., Phen, C., Baldwin, F., Cole, J., **Herndon, N.**, and Zhang, W. (2024) *Classification of mandibular molar furcation involvement in periapical radiographs by deep learning*. *Imaging Science in Dentistry*, Aug;54:e33, 2024.
15. Spoor, S., Wytko, C., Soto, B., Chen, M., Almsaeed, A., Condon, B., **Herndon, N.**, Hough, H., Jung, S., Staton, M., Wegrzyn, J., Main, D., Feltus, F. A., and Ficklin, S. P. (2020). *Tripal and Galaxy: supporting reproducible scientific workflows for community biological databases*. *Database*, 2020. baaa032.
14. **Herndon, N.**, Shelton, J., Gerischer, L., Ioannidis, P., Ninova, M., Dönitz, J., Waterhouse, R. M., Liang, C., Damm, C., Siemanowski, J., Kitzmann, P., Ulrich, J., Dippel, S., Oberhofer, G., Hu, Y., Schwirz, J., Schacht, M., Lehmann, S., Montino, A., Posnien, N., Gurska, D., Horn, T., Seibert, J., Vargas Jentzsch, I. M., Panfilio, K. A., Li, J., Wimmer, E. A., Stappert, D., Roth, S., Schröder, R., Park, Y., Schoppmeier, M., Chung, H.-R., Klingler, M., Kittelmann, S., Friedrich, M., Chen, R., Altincicek, B., Vilcinskis, A., Zdobnov, E., Griffiths-Jones, S., Ronshaugen, M., Stanke, M., Brown, S. J., and Bucher, G. (2020). *Enhanced genome assembly and a new official gene set for *tribolium castaneum**. *BMC Genomics*, 21(1):47.
13. Wegrzyn, J. L., Falk, T., Grau, E., Buehler, S., Ramnath, R., and **Herndon, N.** (2019). *Cyberinfrastructure and resources to enable an integrative approach to studying forest trees*. *Evolutionary Applications*, 00:1-14, 2019.
12. Wegrzyn, J. L., Staton, M. A., Street, N. R., Main, D., Grau, E., **Herndon, N.**, Buehler, S., Falk, T., Zaman, S., Ramnath, R., Richter, P., Sun, L., Condon, B., Almsaeed, A., Chen, M., Mannapperuma, C., Jung, S., and Ficklin, S. (2019). *Cyberinfrastructure to improve forest health and productivity: The role of tree databases in connecting genomes, phenomes, and the environment*. *Frontiers in Plant Science*, 10:813, 2019.
11. Harper, L., Campbell, J., Cannon, E. K. S., Jung, S., Poelchau, M., Walls, R., Andorf, C., Arnaud, E., Berardini, T. Z., Birkett, C., Cannon, S., Carson, J., Condon, B., Cooper, L., Dunn, N., Elisk, C. G., Farmer, A., Ficklin, S. P., Grant, D., Grau, E., **Herndon, N.**, Hu, Z.-L., Humann, J., Jaiswal, P., Jonquet, C., Laporte, M.-A., Larmande, P., Lazo, G., McCarthy, F., Menda, N., Mungall, C. J., Munoz-Torres, M. C., Naithani, S., Nelson, R., Neddill, D., Park, C., Reecy, J., Reiser, L., Sanderson, L.-A., Sen, T. Z., Staton, M., Subramaniam, S., Tello-Ruiz, M. K., Unda, V., Unni, D., Wang, L., Ware, D., Wegrzyn, J., Williams, J., Woodhouse, M., Yu, J., and Main, D. (2018). *AgBioData Consortium Recommendations for Sustainable Genomics and Genetics Databases for Agriculture*, Database, 2018:bay088.
10. Falk, T., **Herndon, N.**, Grau, E., Buehler, S., Richter, P., Zaman, S., Baker, E. M., Ramnath, R., Ficklin, S., Staton, M., Feltus, F. A., Jung, S., Main, D., and Wegrzyn, J. L. (2018). *Growing and cultivating the forest genomics database, TreeGenes*. Database (2018) Vol. 2018.
9. Kim, D., Jaworski, D. C., Cheng, C., Nair, A. D. S., Ganta, R. R., **Herndon, N.**, Brown, S. J., and Park, Y. (2018). *The transcriptome of the lone star tick, Amblyomma americanum*,

- reveals molecular changes in response to infection with the pathogen, Ehrlichia chaffeensis.* Journal of Asia-Pacific Entomology, 21(3):852–863, 2018.
8. Li, H., Caragea, D., Caragea, C., and **Herndon, N.** (2017). *Disaster response aided by tweet classification with a domain adaptation approach.* Journal of Contingencies and Crisis Management, 2017;00:1-12.
  7. Kanost, M. R., Arrese, E. L., Cao, X., Chen, Y.-R., Chellapilla, S., Goldsmith, M. R., Grosse-Wilde, E., Heckel, D. G., **Herndon, N.**, Jiang, H., Papanicolaou, A., Qu, J., Soulages, J. L., Vogel, H., Walters, J., Waterhouse, R. M., Ahn, S.-J., Almeida, F. C., An, C., Aqrawi, P., Bretschneider, A., Bryant, W. B., Bucks, S., Chao, H., Chevignon, G., Christen, J. M., Clarke, D. F., Dittmer, N. T., Ferguson, L. C., Garavelou, S., Gordon, K. H., Gunaratna, R. T., Han, Y., Hauser, F., He, Y., Heidel-Fischer, H., Hirsh, A., Hu, Y., Jiang, H., Kalra, D., Klinner, C., König, C., Kovar, C., Kroll, A. R., Kuwar, S. S., Lee, S. L., Lehman, R., Li, K., Li, Z., Liang, H., Lovelace, S., Lu, Z., Mansfield, J. H., McCulloch, K. J., Mathew, T., Morton, B., Muzny, D. M., Neunemann, D., Onger, F., Pauchet, Y., Pu, L.-L., Pyrousis, I., Rao, X.-J., Redding, A., Roesel, C., Sanchez-Gracia, A., Schaack, S., Shukla, A., Tetreau, G., Wang, Y., Xiong, G.-H., Traut, W., Walsh, T. K., Worley, K. C., Wu, D., Wu, W., Wu, Y.-Q., Zhang, X., Zou, Z., Zucker, H., Briscoe, A. D., Burmester, T., Clem, R. J., Feyereisen, R., Grimmelikhuijzen, C. J., Hamodrakas, S. J., Hansson, B. S., Huguet, E., Jermin, L. S., Lan, Q., Lehman, H. K., Lorenzen, M., Merzendorfer, H., Michalopoulos, I., Morton, D. B., Muthukrishnan, S., Oakeshott, J. G., Palmer, W., Park, Y., Passarelli, A. L., Rozas, J., Schwartz, L. M., Smith, W., Southgate, A., Vilcinskis, A., Vogt, R., Wang, P., Werren, J., Yu, X.-Q., Zhou, J.-J., Brown, S. J., Scherer, S. E., Richards, S., and Blissard, G. W. (2016). *Multifaceted biological insights from a draft genome sequence of the tobacco hornworm moth, Manduca sexta.* Insect Biochemistry and Molecular Biology 76 (2016): 118-147.
  6. Raithel, S., Johnson, L., Galliard, M., Brown, S. J., Shelton, J. M., **Herndon, N.**, and Bello, N. M. (2016). *Inferential considerations for low-count RNA-seq transcripts: a case study on an edaphic subspecies of dominant prairie grass Andropogon gerardii.* BMC Genomics, 17(140):1-16.
  5. **Herndon, N.**, and Caragea, D. (2016). *A Study of Domain Adaptation Classifiers Derived from Logistic Regression for the Task of Splice Site Prediction.* IEEE Transactions on NanoBioscience, PP(99):1-9.
  4. **Herndon, N.**, and Caragea, D. (2016). *An evaluation of approaches for using unlabeled data with domain adaptation.* Network Modeling Analysis in Health Informatics and Bioinformatics, 5(25):1-12.
  3. Tangirala, K., **Herndon, N.**, and Caragea, D. (2016). *A Comparative Analysis between k-mers and Community Detection-based Features for the Task of Protein Classification.* IEEE Transactions on NanoBioscience, PP(99):1-9.
  2. Shelton, J. M., Coleman, M. C., **Herndon, N.**, Lu, N., Lam, E. T., Anantharaman, T., Sheth, P., and Brown, S. J. (2015). *Tools and pipelines for BioNano data: molecule assembly pipeline and FASTA super scaffolding tool.* BMC Genomics, 16(1):734.
  1. Zhao, C., Escalante, L., Chen, H., Benatti, T., Qu, J., Chellapilla, S., Waterhouse, R., Wheeler, D., Andersson, M., Bao, R., Batterton, M., Behura, S., Blankenburg, K., Caragea, D., Carolan, J., Coyle, M., El-Bouhssini, M., Francisco, L., Friedrich, M., Gill, N., Grace, T., Grimmelikhuijzen, C., Han, Y., Hauser, F., **Herndon, N.**, Holder, M., Ioannidis, P., Jackson, L., Javaid, M., Jhangiani, S., Johnson, A., Kalra, D., Korchina,

V., Kovar, C., Lara, F., Lee, S., Liu, X., Löfstedt, C., Mata, R., Mathew, T., Muzny, D., Nagar, S., Nazareth, L., Okwuonu, G., Ogeri, F., Perales, L., Peterson, B., Pu, L.-L., Robertson, H., Schemerhorn, B., Scherer, S., Shreve, J., Simmons, D., Subramanyam, S., Thornton, R., Xue, K., Weissenberger, G., Williams, C., Worley, K., Zhu, D., Zhu, Y., Harris, M., Shukle, R., Werren, J., Zdobnov, E., Chen, M.-S., Brown, S., Stuart, J., and Richards, S. (2015). *A Massive Expansion of Effector Genes Underlies Gall-Formation in the Wheat Pest Mayetiola destructor*. *Current Biology*, 25(5):613 - 620.

### Book Chapters

4. Mehta, A., Bi, R., Moamen, S., Abdelaal, M., and **Herndon, N.** (2023). *Automatic Detection of Facial Landmarks for Denture Models*. Cuzzocrea, A., Gusikhin, O., Hammoudi, S., Quix, C. (Eds.) *Data Management Technologies and Applications. Communications in Computer and Information Science*, Springer Nature Switzerland, 2023, vol. 1860, pp. 114–133.
3. **Herndon, N.**, Falk, T., Grau, E. S., Jung, S., Ficklin, S., Main, D., Staton, M. E., and Wegrzyn, J. L. (2018). *Association mapping for forest trees with CartograTree*. Thessen, AE (Ed.) *Application of Semantic Technologies in Biodiversity Science. Studies on the Semantic Web*, IOS Press/AKA Verlag, 2018, vol. 33, pp. 137-149.
2. **Herndon, N.**, and Caragea, D. (2015). *Empirical Study of Domain Adaptation Algorithms on the Task of Splice Site Prediction*. In *Biomedical Engineering Systems and Technologies*, ser. *Communications in Computer and Information Science*, Springer International Publishing, 2015, vol. 511, pp. 195-211.
1. **Herndon, N.**, and Caragea, D. (2014). *Predicting Protein Localization Using a Domain Adaptation Approach*. In *Biomedical Engineering Systems and Technologies*, ser. *Communications in Computer and Information Science*, Springer Berlin Heidelberg, 2014, vol. 452, pp. 191-206.

### Interviews, Speeches, Lectures

10. Hart, D., and **Herndon, N.** (2024). *How AI Learns and Why That Matters*. Greenville Noon Rotary Club, Greenville, NC. August 19, 2024. Short presentation.
9. **Herndon, N.**, and Hart, D. (2024). *Is AI a friend or a foe?*. AI Roundtable: Artificial Intelligence and Machine Learning in Defense & Industry at DANC Science & Technology Forum. April 23, 2024. Short presentation and panel discussion.
8. **Herndon, N.** (2023). *You and AI*. East Carolina University's podcast, Talk Like a Pirate, hosted by Rich Klindworth. November 8, 2023. Podcast interview.
7. **Herndon, N.**, Lassiter, S., and Madigan, B. (2023). *Classroom Conversations: The discussions of AI in classrooms* WNCT 9 On Your Side, hosted by Erin Jenkins and Sarah Gray Barr, August 29<sup>th</sup> 2023. TV interview.
6. **Herndon, N.** (2023). NewsChannel 12 Investigates, hosted by Tyler Hardin, NewsChannel 12. TV interview.
  - *Artificial intelligence on the rise?*, May 4, 2023.
  - *Artificial intelligence: Part 2*, May 11, 2023.
5. Haberstroh, A., Kariko, D., Kavner, A., Lamb, R., Thomas, J., and **Herndon, N.** (2023). *Transforming Research Practice Through Artificial Intelligence*, April 26<sup>th</sup> 2023, East Carolina University, Greenville, NC. Panel discussion.
4. Banks, W., Faranesh, L., Click-Kimber, C.J., **Herndon, N.**, Haberstroh, A., Thomas, J., and Tillman, J. (2023). *Teaching and Learning in the Age of Generative Artificial*

*Intelligence (ChatGPT): Opportunities and Challenges*, April 3<sup>rd</sup> 2023, East Carolina University, Greenville, NC. Panel discussion.

3. **Herndon, N.** (2023). *Ethical considerations for data collection and use*. Love Data Week, Greenville, NC. February 14, 2023. Lecture.
2. **Herndon, N.** (2022). *Is AI smarter than a 5<sup>th</sup> grader?* Nerd Nite Greenville, NC. October 14, 2022. 20 minute fun-yet-informative presentation.
1. **Herndon, N.** (2021). *Data science to mitigate global warming effects*. The 30<sup>th</sup> International Conference on Software Engineering and Data Engineering (SEDE 2021), Virtual Conference Online. October 11, 2021. Keynote speech.

### Peer-reviewed Conference Papers

20. Vilkomir, K. and **Herndon, N.** (2024). *Challenges of Automatic Document Processing with Historical Data*. In Proceedings of the 62<sup>nd</sup> ACMSE Conference (ACMSE 2024), Marietta, GA, pp. 50-59. [Regular paper]
19. Rose, M., Geradts, J., and **Herndon, N.** (2024). *Deep learning in digital breast pathology*. In Proceedings of the 17<sup>th</sup> International Joint Conference on Biomedical Engineering Systems and Technologies (BIOINFORMATICS 2024), Rome, Italy, pp. 404-414. [Regular paper. Acceptance rate: 11%]
18. Mehta A., Abdelaal M., Sheba M., and **Herndon, N.** (2023). *Finding Similar Non-Collapsed Faces to Collapsed Faces Using Deep Learning Face Recognition*. In Proceedings of the 18<sup>th</sup> International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISAPP 2023), Lisbon, Portugal, pp. 897-904. [Short paper]
17. Mehta A., Abdelaal M., Sheba M., and **Herndon, N.** (2022). *Automated Neoclassical Vertical Canon Validation in Human Faces with Machine Learning*. In Proceedings of the 11<sup>th</sup> International Conference on Data Science, Technology and Applications (DATA 2022), Lisbon, Portugal, pp. 461-467. [Short paper]
16. Olufowobi, K., and **Herndon, N.** (2022). *Towards a Low-cost Vision System for Real-time Pavement Condition Assessment*. In Proceedings of the 11<sup>th</sup> International Conference on Pattern Recognition Applications and Methods (ICPRAM 2022), Online Streaming, pp. 526-533. [Short paper]
15. Gudivada, V.N., **Herndon, N.**, and Rao, D. (2021). *ISPeL: A topic dependency-driven system for personalized learning*. In Proceedings of the 15<sup>th</sup> International Conference on Semantic Computing (ICSC 2021), Laguna Hills, CA, pp. 463-467.
14. Sokolov, M., and **Herndon, N.** (2021). *Predicting Malware Attacks using Machine Learning and AutoAI*. In Proceedings of the 10<sup>th</sup> International Conference on Pattern Recognition Applications and Methods (ICPRAM 2021), Vienna, Austria, pp. 295-301. [Short paper]
13. Sokolov, M., Olufowobi, K., and **Herndon, N.** (2020). *Visual Spoofing in Content-Based Spam Detection*. In Proceedings of the 13<sup>th</sup> International Conference on Security of Information and Networks (SINCONF 2020), Istanbul, Turkey, pp. 1-5. [Short paper, **Best presentation award**]
12. Rao, D.L., Pala, V.R., **Herndon, N.**, and Gudivada, V.N. (2020). *A Deep Learning Architecture for Corpus Creation for Telugu Language*. In: Iyer B., Rajurkar A., Gudivada V. (eds) Applied Computer Vision and Image Processing. Advances in Intelligent Systems and Computing, vol 1155. Springer, Singapore.
11. **Herndon, N.**, Grau, E. S., Batra, I., Demurjian Jr., S. A., Vasquez-Gross, H. A., Staton,

- M. E., and Wegrzyn, J. L. (2016). *CartograTree: Enabling Landscape Genomics for Forest Trees*. In Proceedings of the Open Source Geospatial Research & Education Symposium (OGRS 2016), Perugia, Italy, pp. 1-7. [Short paper]
10. **Herndon, N.**, and Caragea, D. (2016). *Ab initio Splice Site Prediction with Simple Domain Adaptation Classifiers*. In Proceedings of the 7<sup>th</sup> International Conference on Bioinformatics Models, Methods and Algorithms (BIOINFORMATICS 2016), Rome, Italy, pp. 245-252. [Short paper]
  9. Roy, S., DeLoach, J., Li, Y., **Herndon, N.**, Caragea, D., Ou, X., Ranganath, V. P., Li, H., and Guevara, N. (2015). *Experimental Study with Real-world Data for Android App Security Analysis using Machine Learning*. In Proceedings of the 2015 Annual Computer Security Applications Conference (ACSAC 2015), Los Angeles, CA, pp. 81-90. [Regular paper. Acceptance rate: 25%]
  8. Tangirala, K., **Herndon, N.**, and Caragea, D. (2015). *Community Detection-Based Feature Construction for Protein Sequence Classification*. In Proceedings of the 11<sup>th</sup> International Symposium on Bioinformatics Research and Applications (ISBRA 2015), Norfolk, VA, pp. 331-342. [Regular paper. Acceptance rate: 35%]
  7. Li, H., Guevara, N., **Herndon, N.**, and Caragea, D., Neppalli, K., Caragea, C., Squicciarini, A. C., Tapia, A. H. (2015). *Twitter Mining for Disaster Response: A Domain Adaptation Approach*. In Proceedings of the 12<sup>th</sup> International Conference on Information Systems for Crisis Response and Management (ISCRAM 2015), Kristiansand, Norway. [Short paper. Acceptance rate: 70%]
  6. **Herndon, N.**, and Caragea, D. (2015). *An Evaluation of Self-training Styles for Domain Adaptation on the Task of Splice Site Prediction*. In Proceedings of the 4<sup>th</sup> International Symposium on Network Enabled Health Informatics, Biomedicine and Bioinformatics (HI-BI-BI 2015), Paris, France, pp. 1042-1047. [Regular paper. Acceptance rate: 35%. **Best paper award**]
  5. **Herndon, N.**, and Caragea, D. (2015). *Domain Adaptation with Logistic Regression for the Task of Splice Site Prediction*. In Proceedings of the 11<sup>th</sup> International Symposium on Bioinformatics Research and Applications (ISBRA 2015), Norfolk, VA, pp. 125-137. [Regular paper. Acceptance rate: 35%]
  4. **Herndon, N.**, Tangirala, K., and Caragea, D. (2014). *Predicting Protein Localization Using a Domain Adaptation Naïve Bayes Classifier with Burrows Wheeler Transform Features*. In Proceedings of the 6<sup>th</sup> IEEE International Conference on Bioinformatics and Biomedicine (BIBM 2014), Belfast, UK, pp. 501-504. [Short paper. Acceptance rate: 38%]
  3. **Herndon, N.**, and Caragea, D. (2014). *Empirical Study of Domain Adaptation with Naïve Bayes on the Task of Splice Site Prediction*. In Proceedings of the 5<sup>th</sup> International Conference on Bioinformatics Models, Methods and Algorithms (BIOINFORMATICS 2014), Angers, France, pp. 57-67. [Regular paper. Acceptance rate: 14%. **Nominated for best paper award**]
  2. **Herndon, N.**, and Caragea, D. (2013). *Naïve Bayes Domain Adaptation for Biological Sequences*. In Proceedings of the 4<sup>th</sup> International Conference on Bioinformatics Models, Methods and Algorithms (BIOINFORMATICS 2013), Barcelona, Spain, pp. 62-70. [Regular paper. Acceptance rate: 10%. **Nominated for best student paper award**]
  1. Vert, G., and **Herndon, N.** (2006). *Secure Simultaneous Search of Distributed, Heterogeneous Bioinformatics Databases*. In Proceedings of the 2006 International Conference



on Security & Management (SAM 2006), Las Vegas, NV, USA, pp. 384-389.

## Professional Activities

### Department and University Service

- AUG 28, 2024 - **Member**, *University Graduate Council*  
PRESENT • Approve changes to all graduate academic policies, including graduate curriculum and degree programs.
- AUG 16, 2024 - **Member**, *Personnel/Tenure/Promotion Committee*  
PRESENT • Review applications for tenure, promotion, and emeritus status and make recommendations to the chair of the department.
- DEC 8, 2023 - **Chair**, *Search Committee for Tenure Track Faculty*  
APR 10, 2024 • Reviewed and ranked applications.  
• Conducted online interviews.  
• Made hiring recommendations to personnel committee and department chair.
- AUG 16, 2023 - **Member**, *CET Strategic Planning Committee*  
DEC 4, 2023 • Coordinate the development of the CET strategic plan for 2023-2028.
- AUG 12, 2023 - **Chair**, *Graduate Curriculum Committee*  
PRESENT • Oversee and coordinate educational programs to assure that each degree program and/or concentration contains essential curricular components, has appropriate content and pedagogy, and maintains discipline currency.
- MAY 10, 2023 - **Member**, *Interdisciplinary Applied Data Analytics*  
PRESENT • Review the curriculum for the graduate certificate.
- APR 20, 2023 - **Member**, *Search Committee for Chair of the Computer Science Department*  
DEC 8, 2023 • Reviewed and ranked applications.  
• Conducted online interviews.  
• Made hiring recommendations to chair of the search committee.
- SEP 14, 2022 - **Member**, *CET Graduate Faculty Committee*  
PRESENT • Make recommendations to the Dean regarding all graduate matters.
- JUL 1, 2022 - **Graduate Program Director**, *Department of Computer Science*  
PRESENT • Review and update the department's graduate programs and curricula.  
• Conduct recruitment sessions for the department's graduate programs.  
• Review graduate applications.  
• Create budget, assessment reports, and course schedules.  
• Assign graduate assistants to teaching assistant roles.
- JUL 1, 2022 - **Member**, *Graduate Curriculum Committee*  
AUG 11, 2023 • Oversaw and coordinated educational programs to assure that each degree program and/or concentration contains essential curricular components, has appropriate content and pedagogy, and maintains discipline currency.
- AUG 10, 2022 - **Member**, *Assessment Committee for Bachelor of Science in Software Engineering*  
PRESENT • Prepare assessment reports for IPAR.
- OCT 29, 2020 - **Member**, *CET Recognition Ceremony Committee*  
AUG 16, 2023 • Organize recognition ceremony events.

- AUG 10, 2020 - **Member**, *Department Assessment Committee*  
PRESENT ● Prepare assessment reports for IPAR.
- AUG 10, 2020 - **Member**, *CET Assessment Committee*  
PRESENT ● Ensure assessment reports are submitted as required.
- AUG 10, 2022 - **Chair**, *Search Committee for Two Tenure Track Faculty*  
DEC 1, 2022 ● Reviewed and ranked applications.  
● Scheduled and conducted online interviews.  
● Scheduled and conducted on campus interviews.  
● Made hiring recommendations to personnel committee and department chair.
- MAR 1, 2022 - **Member**, *Search Committee for Pharma Pathway Advisor*  
APR 30, 2022 ● Reviewed and ranked applications.  
● Conducted online interviews.  
● Made hiring recommendations to chair of the search committee.

### *Campus organizations*

- AUG 23, 2021 - **Faculty sponsor**, *ACM Student Chapter*.  
AUG 21, 2022 ● Coordinated with the officers to organize meetings and workshops throughout the year, and to create a website for the chapter, <https://ecu.acm.org>.
- AUG 23, 2021 - **Coordinator**, *Computer Science Student Ambassador Program*.  
AUG 21, 2022 ● Mentored seven undergraduate student ambassadors.  
● Coordinated eight high school and two middle school visits, each attended by 10 to 15 students.

### *Reviewer for Journals*

9. BioData Mining, one article
8. Springer Nature – Scientific Reports, one article
7. Social Network Analysis and Mining, two articles
6. Pattern Recognition Letters, one article
5. PLoS One, three articles
4. Network Modeling Analysis in Health Informatics and Bioinformatics, one article
3. Knowledge-Based Systems, one article
2. F1000Research, one article
1. Computational Intelligence, one article

### *Reviewer for Conferences*

5. 2024 ACM Southeast (ACMSE) conference, three papers
4. 2021 ACM Southeast (ACMSE) conference, three papers
3. 2020 7<sup>th</sup> International Conference on Artificial Intelligence (ICOAI 2020), one paper
2. DQIS 2020: IEEE International Workshop on Data Quality for Intelligent Systems, one paper
1. 25<sup>th</sup> – 29<sup>th</sup> Int'l Conference on Software Engineering and Data Engineering, two to three papers per year



---

## Academic Supervision

### Master students advised

#### Thesis

7. Madison Rose. *Patch Based Analysis with Machine Learning to Aid Breast Cancer Recurrence Prediction*. MS in Data Science (May 2024).
6. Gabrielle Stein. *The Perils of Generative Model Inbreeding: Evaluating the Consequences of Cross-model Training in Large Language Models*. MS in Computer Science (May 2024).
5. Andrew Edwards. *Microservice Architecture for Stateful Applications*. MS in Computer Science (May 2024).
4. Katerina Vilkomir. *Deep Learning-based Mandibular Molars Detection and Classification of Furcation Involvement*. MS in Data Science (May 2024).
3. Ashwinee Mehta. *Automated Dental Aesthetics with Machine Learning*. MS in Computer Science (December 2022).
2. Kehinde Olufowobi. *Towards a Low-cost Vision System for Real-time Pavement Condition Assessment*. MS in Computer Science (July 2021).
1. Mark Sokolov. *Applied Machine Learning for Cybersecurity in Spam Filtering and Malware Detection*. MS in Software Engineering (December 2020).

#### Project

2. Jonathan R. Martin. *Containerization of an Autograder*. MS in Software Engineering project (December 2023).
1. Marcey Lewin. *Frequency Visualization with D3*. MS in Software Engineering project (May 2020).

### Master students currently advised

2. Amanda Lucas. MS in Data Science. Expected graduation: May 2025.
1. Ayobami Alimi. MS in Data Science. Expected graduation: May 2025.

### Examination committees – Master students

#### Thesis

15. Elaine Cahill. *An Empirical Exploration of Artificial Intelligence for Software Defect Prediction in Software Engineering*. MS in Software Engineering (July 2024). Advisor: Dr. Madhusudan Srinivasan.
14. Cody Johnson. *Student-centered Learning Through Augmented Reality in Anatomy and Physiology Education*. MS in Computer Science (May 2024). Advisor: Dr. Rui Wu.
13. Abelson Abueg. *A Comparative Study on MFCC, GFCC, BFCC, and CQCC Spectral Speech Feature Performance in X-vector Clustering*. MS in Software Engineering (July 2023). Advisor: Dr. Nasseh Tabrizi.
12. Sharon Sone Mamua. *Time Series Forecasting Using Generative Adversarial Network*. MS in Computer Science (May 2023). Advisor: Dr. Rui Wu.
11. Connor D. Bullard. *QPE: A System for Deconstructing SQL Queries*. MS in Computer Science (May 2023). Advisor: Dr. Venkat Gudivada.
10. Dhana Srimanthini Tipirneni. *An Empirical Study of Concurrent Feature Usage in GO*. MS in Computer Science (December 2022). Advisor: Dr. Nasseh Tabrizi.

9. Ganesh Babu. *QA4R: A Question Answering System for R Packages*. MS in Computer Science (July 2022). Advisor: Dr. Venkat Gudivada.
8. Mehrdad Rezei. *Reinforcement Learning based Recommender System using Q-Learning and Deep Q-Learning*. MS in Computer Science (July 2022). Advisor: Dr. Nasseh Tabrizi.
7. Linwood Earl Hall Jr. *Human Organ Real-time Localization Using HTC Vive Tracking System and Machine Learning Models*. MS in Computer Science (May 2022). Advisor: Dr. Rui Wu.
6. Jennifer N. Andriot. *An HMM-based OCR Framework for Telugu Using a Transfer Learning Approach*. MS in Data Science (July 2021). Advisor: Dr. Venkat Gudivada.
5. Zeinab K. N. Jooneghani. *Comparison of Topic Modeling Methods for Analyzing Tweets on COVID-19 Vaccine*. MS in Data Science (July 2021). Advisor: Dr. Nasseh Tabrizi.
4. William F. Clark. *Development Operations for Big Data Analytics in Real-Time NoSQL Systems*. MS in Computer Science (December 2020). Advisor: Dr. Venkat Gudivada.
3. Salar Houshvard. *Framework for Automatically Generate Questions for Different Topics in Discrete Mathematics*. MS in Software Engineering (December 2020). Advisor: Dr. Venkat Gudivada.
2. Swetha Busireddy. *Framework for Question Answering System Using Dynamic Co-attention Networks*. MS in Computer Science (May 2020). Advisor: Dr. Venkat Gudivada.
1. Rakesh Matta. *Environmental Model Accuracy Improvement Framework Using Statistical Techniques and a Novel Training Approach*. MS in Computer Science (May 2020). Advisor: Dr. Rui Wu.

#### Project

1. Jennifer Smith. *A Comparison of Classification Tree and Association Rule Mining Models in Biomedical Studies*. MS in Computer Science (May 2020). Advisor: Dr. Qin Ding.

#### Honors College students advised

1. Madison Rose. *Machine Learning Techniques to Aid Breast Cancer Recurrence Prediction*. Signature Honors Project (May 2023).

#### Honors College currently students advised

1. Majoie Ngandi. Area: *Pathology image analysis*.

#### Undergraduate students advised

19. Jordan Welborn. Areas: *Large language models* (Summer and Fall 2023), and *Dental image analysis* (Spring 2023).
18. Grant Melvin. Area: *Web interface for large language models*. (Summer and Fall 2023).
17. Alec Lozano. Area: *Information retrieval*. (Summer and Fall 2023).
16. Ryan Balungeli. Area: *Text summarization*. (Summer and Fall 2023).
15. Eli Richmond – from Arkansas State University. Area: *Training transformers to generate code to solve arithmetic problems*. Research experience for undergraduates (REU) program (Summer 2023).
14. Jaxon Bauer. Area: *A Review of Reinforcement Learning Methods for Models across Physical and Virtual Domains*. Research experience for undergraduates (REU) program (Summer 2023).

13. Gregory Maddox – from University of Houston. Area: *Search Engine with Question and Answer Capabilities for Document Retrieval*. Research experience for undergraduates (REU) program (Summer 2023).
12. Jarred Desrosiers. Areas: *Pathology image analysis* (Spring and Fall 2022), and *Robotics with NAO<sup>6</sup>* (Fall 2021).
11. Joseph Aaron Wireman Jr. Area: *Data visualization for CartograPlant*. (Spring and Fall 2022).
10. Richard Bi – rising sophomore at the University of Illinois Urbana-Champaign. Area: *3D facial landmarks*. Research experience for undergraduates (REU) program (Summer 2022).
9. April Murakami – from Pacific University. Area: *Pathology image analysis*. Research experience for undergraduates (REU) program (Summer 2022).
8. Lucille Legacy. Area: *Pathology image analysis*. (Spring 2022).
7. Alex Lowe. Area: *GIS data integration for CartograPlant*. (Summer 2021 to Spring 2022).
6. Jahmad Attucks. Area: *Data visualization for CartograPlant*. (Spring 2022).
5. Katie Warren. Area: *Robotics with NAO<sup>6</sup>*. (Fall 2021 and Spring 2022).
4. Seymone Gugneja. Area: *Robotics with NAO<sup>6</sup>*. (Fall 2021 and Spring 2022).
3. Bryan Holguin Herrera. Areas: *Data visualization for CartograPlant* (Summer and Fall 2021), *Data science for climate change – Odyssey Extreme Education* (Spring and Summer 2021), and *Robotics with NAO<sup>6</sup>* (Spring 2020).
2. Leo Espinoza. Area: *Robotics with NAO<sup>6</sup>*. (Spring 2020).
1. Hunter Bardasian Wright. Area: *Deep learning for computer vision with AWS DeepLens*. (Spring 2020).

#### Undergraduate students currently advised

3. Ahmad Abulabda. Area: *Pathology image analysis*.
2. Sofia Azam. Area: *AI ethics*.
1. Marian Sousan. Area: *AI ethics*.

#### High school students advised

1. Jacob Grinberg [co-advised with Robert R. Gotwals, Jr.]. Areas: *Reinforcement Learning, Imitation Learning*. Research in Computational Science (RCompSci) program at the North Carolina School of Science and Mathematics, Durham, NC (Summer 2020).

## Teaching Experience

### East Carolina University, Greenville, NC

- AUG 19, 2024 - **Instructor**, *DASC 6025 – Data Cleaning and Quality Assessment*  
 DEC 2, 2024
- Created this new course.
  - Prepared and presented lectures, prepared assignments.
  - Maximum enrollment of 13 students, with the majority from Data Science.
- JAN 8, 2024 - **Instructor**, *CSCI 4140 – Natural Language Processing*  
 MAY 6, 2024
- Maximum enrollment of 41 students, all from Computer Science.
- JAN 8, 2024 - **Instructor**, *CSCI/DASC 6040 – Computational Analysis of Natural Languages*  
 MAY 6, 2024
- Max. enrollment of 21 students, 11 from Computer Science and 10 from Data Science.

- JAN 8, 2024 - **Instructor**, *CSCI/DASC 6010 – Big Data Analytics and Management*  
MAY 6, 2024 • Max. enrollment of 36 students, 20 from Computer Science and 16 from Data Science.
- AUG 21, 2023 - **Instructor**, *CSCI 3675 – Principles of Programming Languages*  
DEC 13, 2023 • Maximum enrollment of 89 students, with the majority from Computer Science.
- JAN 9, 2023 - **Instructor**, *CSCI 4140 – Natural Language Processing*  
MAY 8, 2023 • Maximum enrollment of 45 students, all from Computer Science.
- JAN 9, 2023 - **Instructor**, *CSCI 4180 – Big Data Analytics*  
MAY 8, 2023 • Maximum enrollment of 33 students, all from Computer Science.
- JAN 9, 2023 - **Instructor**, *CSCI/DASC 6040 – Computational Analysis of Natural Languages*  
MAY 8, 2023 • Max. enrollment of 16 students, 10 from Computer Science and 6 from Data Science.
- JAN 9, 2023 - **Instructor**, *CSCI/DASC 6010 – Big Data Analytics and Management*  
MAY 8, 2023 • Maximum enrollment of 35 students, with the majority from Data Science.
- AUG 22, 2022 - **Instructor**, *CSCI 3675 – Principles of Programming Languages*  
DEC 14, 2022 • Maximum enrollment of 102 students, with the majority from Computer Science.
- AUG 22, 2022 - **Instructor**, *CSCI 6905 – Special Topics on Data Visualization and Communication*  
DEC 14, 2022 • Updated and presented lectures, updated homework assignments, and project.  
• Maximum enrollment of 18 students from Computer Science, Software Engineering, Data Science, and Integrated Coastal Sciences.
- JAN 10, 2022 - **Instructor**, *CSCI 4110 – High Performance Computing*  
MAY 9, 2022 • Course delivered in collaboration with UC Berkeley.  
• Maximum enrollment of 10 students, all from Computer Science.
- JAN 10, 2022 - **Instructor**, *CSCI 4140 – Natural Language Processing*  
MAY 9, 2022 • Prepared and presented lectures, prepared assignments.  
• Maximum enrollment of 30 students, all from Computer Science.
- JAN 10, 2022 - **Instructor**, *CSCI/DASC 6040 – Computational Analysis of Natural Languages*  
MAY 9, 2022 • Prepared and presented lectures, prepared assignments.  
• Max. enrollment of 20 students, 12 from Computer Science and 8 from Data Science.
- JAN 10, 2022 - **Instructor**, *CSCI/DASC 6905 – Special Topics on High Performance Computing*  
MAY 9, 2022 • Course delivered in collaboration with UC Berkeley.  
• Max. enrollment of 3 students, two from Computer Science and one from Data Science.
- AUG 23, 2021 - **Instructor**, *CSCI 3675 – Principles of Programming Languages*  
DEC 17, 2021 • Prepared and presented lectures, prepared homework assignments, quizzes and exams.  
• Maximum enrollment of 68 students, with the majority from Computer Science.
- AUG 23, 2021 - **Instructor**, *CSCI 4180 – Big Data Analytics*  
DEC 17, 2021 • Redesigned this undergraduate course.  
• Prepared and presented lectures, prepared homework assignments, quizzes and project.  
• Maximum enrollment of 6 students, all from Computer Science.
- AUG 23, 2021 - **Instructor**, *CSCI 4905 – Special Topics on Data Visualization and Communication*  
DEC 17, 2021 • Created this new course.  
• Prepared and presented lectures, prepared homework assignments, quizzes and project.  
• Maximum enrollment of 9 students, with the majority from Computer Science.

- AUG 23, 2021 - **Instructor**, *CSCI/DASC 6010 – Big Data Analytics and Management*  
 DEC 17, 2021
  - Prepared and presented lectures, prepared homework assignments, quizzes and project.
  - Maximum enrollment of 13 students, with the majority from Data Science.
- AUG 23, 2021 - **Instructor**, *CSCI 6905 – Special Topics on Data Visualization and Communication*  
 DEC 17, 2021
  - Created this new course.
  - Prepared and presented lectures, prepared homework assignments, quizzes and project.
  - Maximum enrollment of 18 students, with half from Computer Science and half from Data Science.
- JAN 19, 2021 - **Instructor**, *CSCI 4110 – High Performance Computing*  
 MAY 7, 2021
  - Course delivered in collaboration with UC Berkeley.
  - Average class size of 5 Computer Science students.
- JAN 19, 2021 - **Instructor**, *CSCI 4140 – Natural Language Processing*  
 MAY 7, 2021
  - Prepared and presented lectures, prepared assignments, supervised and mentored the teaching assistant.
  - Average class size of 37 Computer Science students.
- JAN 19, 2021 - **Instructor**, *CSCI/DASC 6010 – Big Data Analytics and Management*  
 MAY 7, 2021
  - Added material on NoSQL databases (neo4j and MongoDB) – lectures, and assignments.
  - Prepared and presented lectures, prepared homework assignments, quizzes and project.
  - Average class size of 35 students.
- JAN 19, 2021 - **Instructor**, *CSCI/DASC 6040 – Computational Analysis of Natural Languages*  
 MAY 7, 2021
  - Prepared and presented lectures, prepared assignments, supervised and mentored the teaching assistant.
  - Average class size of 6, with the majority of students from Computer Science.
- AUG 10, 2020 - **Instructor**, *CSCI 3675 – Organization of Programming Languages*  
 SEP 25, 2020
  - Redesigned the course using Understanding by Design – changed programming languages covered, updated lectures, and assignments.
  - Prepared and presented lectures, prepared homework assignments, quizzes and exams, supervised and mentored three teaching assistants.
  - Average class size of 72 students, with the majority of students from Computer Science.
- JAN 13, 2020 - **Instructor**, *CSCI 4140 – Natural Language Processing*  
 MAY 7, 2020
  - Redesigned the course – textbooks used, lectures, and assignments.
  - Prepared and presented lectures, prepared assignments, supervised and mentored the teaching assistant.
  - Average class size of 47 Computer Science students.
- AUG 19, 2019 - **Instructor**, *CSCI 3675 – Organization of Programming Languages*  
 DEC 12, 2019
  - Redesigned the course – textbook used, lectures, and assignments.
  - Prepared and presented lectures, prepared homework assignments, quizzes and exams, supervised and mentored the teaching assistant.
  - Average class size of 57 students, with the majority of students from Computer Science.
- AUG 19, 2019 - **Instructor**, *CSCI/DASC 6010 – Big Data Analytics and Management*  
 DEC 12, 2019
  - Designed this new course – lectures, and assignments.
  - Prepared and presented lectures, prepared homework assignments, quizzes and exams.
  - Average class size of 20 students, half online, half in-person/on-campus.

University of Massachusetts, Amherst, MA

- JAN 22, 2019 - **Co-instructor**, *COMPSCI 240 – Reasoning Under Uncertainty*  
MAY 9, 2019
- Prepared and presented lectures, prepared homework assignments, quizzes and exams, supervised and mentored the teaching assistants.
  - Average class size of 200 students, with the majority of students from Computer Science.
- JAN 22, 2019 - **Co-instructor**, *COMPSCI 230 – Computer Systems Principles*  
MAY 9, 2019
- Redesigned the course content, prepared and presented lectures, prepared project assignments and exams, supervised and the mentored teaching assistants.
  - Average class size of 230 students, with the majority of students from Computer Science.
- SEP 4, 2018 - **Co-instructor**, *COMPSCI 230 – Computer Systems Principles*  
DEC 21, 2018
- Prepared and presented lectures, prepared project assignments and exams, supervised and mentored the teaching assistants.
  - Average class size of 230 students, with the majority of students from Computer Science.

Kansas State University, Manhattan, KS

- JAN 19, 2016 - **Co-instructor**, *BIOL/CIS 734 – Introduction to Genomics and Bioinformatics*  
MAY 6, 2016
- Prepared and presented lab material, and graded lab assignments.
  - Average class size of 20 students, with a third of the students from Computer Science and two thirds from Biology, and about half the students from minority groups in STEM.
- JUL 13, 2015 - **Co-instructor**, *BIOL/CIS 890 – NGS Analysis on Beocat and Introduction to Perl programming for Bioinformatics*  
AUG 21, 2015
- Created and delivered lectures.
  - Helped students with in-class hands-on programming assignments.
  - Average class size of 20 students, with a fifth of the students from Computer Science and four fifths from Biology, and about half the students from minority groups in STEM.
- JUL 7, 2014 - **Teaching Assistant**, *BIOL/CIS 890 – NGS Analysis on Beocat and Introduction to Perl programming for Bioinformatics*  
AUG 1, 2014
- Graded assignments and helped students during office hours.
  - Average class size of 20 students, with a fifth of the students from Computer Science and four fifths from Biology, and about half the students from minority groups in STEM.
- JAN 21, 2014 - **Co-instructor**, *BIOL/CIS 734 – Introduction to Genomics and Bioinformatics*  
MAY 9, 2014
- Prepared and presented lab material, and graded lab assignments.
  - Average class size of 20 students, with a third of the students from Computer Science and two thirds from Biology, and about half the students from minority groups in STEM.
- JUN 10, 2013 - **Co-instructor**, *BIOL697 – Programming Perl for Bioinformatics*  
AUG 2, 2013
- Created and delivered lectures.
  - Helped students with in-class hands-on programming assignments.
  - Average class size of 20 students, with a fifth of the students from Computer Science and four fifths from Biology, and about half the students from minority groups in STEM.

### Truckee Meadows Community College, Reno, NV

JAN 18, 2003 - **Teaching Assistant, Math**

- DEC 14, 2003
- Helped students use ALEKS assessment and learning software and explained math concepts when students needed clarification.
  - Average class size was 20, with about half the students from minority groups in STEM, and about a third of the class were non-traditional students.

MAR 1, 2001 - **Tutor, Math**

- JUN 30, 2001
- Tutored introductory college math in 1-on-1 and small group settings.

---

## Professional Experience

### East Carolina University, Greenville, NC

AUG 16, 2024 - **Associate Professor, Department of Computer Science**

- PRESENT
- Mentor junior faculty, in addition to responsibilities listed for Assistant Professor.

AUG 12, 2019 - **Assistant Professor, Department of Computer Science**

- AUG 15, 2024
- Teach undergraduate and graduate courses in Computer Science and Data Science.
  - Supervise and mentor undergraduate and graduate students.
  - Participate in service activities as required by the department.

### University of Massachusetts Amherst, Amherst, MA

SEP 1, 2018 - **Teaching Fellow, College of Information and Computer Sciences**

- AUG 31, 2019
- Taught core undergraduate courses in Computer Science.

### Kansas State University, Manhattan, KS

JAN 3, 2012 - **Bioinformatics Specialist, Bioinformatics Center**

- JUL 15, 2016
- Improved genome assembly for red flour beetle, *Tribolium castaneum*.
  - Collaborated with researchers on genomics projects ranging from assembling and annotating genomes, to differential gene expression.

DEC 1, 2008 - **Programmer Analyst, Office of Undergraduate Admissions**

- JAN 2, 2012
- Created SQL scripts to import data into customer relationship management database and to generate views requested by colleagues.
  - Designed and implemented GUI applications to manage database imports.
  - Developed an application to create customized information packet for potential undergraduate students.

JUN 7, 2010 - **Bioinformatics Intern, Bioinformatics Center**

- JUL 30, 2010
- Configured and ran MAKER to generate gene models for *T.castaneum*.
  - Installed and ran tRNAscan-SE to predict genes that encode for tRNA for *T.castaneum*, then converted the output to GFF format to use it with Apollo and Augustus.

### International Game Technology, Reno, NV

MAR 31, 2008 - **Software Product Assurance Engineer II**

- NOV 21, 2008
- Proposed changes to the Gaming Standards Association for the Game to System (G2S) communication protocol used by slot machines/Electronic Gaming Machines (EGMs) to exchange information with back-of-house systems.



APR 16, 2007 - **Software Product Assurance Engineer I**

MAR 30, 2008 • Developed a GUI application to test the correct implementation of the G2S protocol.

*Barnes & Noble, Inc., Reno Distribution Center, Reno, NV*

MAR 1, 2004 - **Local Area Network Administrator**

APR 13, 2007 • Modified the ladder logic programs for the Allen-Bradley programmable logic controllers (PLCs) to improve the flow of totes and packages throughout the warehouse, and to accommodate the extension of the conveyor system.

• Designed and implemented an application to control the shipping of packages; the application received the barcode data from scanners, queried the AS/400 DB2 database to determine the destination, passed the lane assignment to the PLC, and displayed the information about each package in a GUI.

OCT 16, 2000 - **Information & Technology Assistant**

FEB 29, 2004 • Performed systems administration tasks, e.g., configured printers and workstations, troubleshoot issues with devices, custom applications, user accounts, networking, etc.

---

## Professional Development

### *Diversity, Inclusion and Equity*

AUG 7-8, 2023 Participated in the *LEVEL UP* workshop organized by the Computing Research Association, in Washington, DC. In this workshop I contributed to the development of an evidence-based report of best practices that computing departments should implement nationwide.

FEB 1, 2018 Participated in the *Implementing Inclusive Teaching Principles and Approaching Challenging Conversations* workshop led by Noga Shemer, at University of Connecticut. In this workshop I learned strategies for creating an inclusive learning environment and implementing inclusive teaching principles in the classroom.

SEP 18, 2015 Attended the talk *Finding Joy in Teaching Students of Diverse Backgrounds: Culturally Responsive and Socially Just Practices in U.S. Classrooms* by Professor Emerita Sonia Nieto. A presentation as part of the College of Education's Distinguished Educational Research Lecture Series at Kansas State University.

### *Teaching*

SPRING 2022 Redesigned a course with *Applying the QM Rubric* at East Carolina University.

APR 26, 2018 Participated in the *Slow Learning for Deep Learning – An Introduction to Contemplative Pedagogy* workshop led by Cynthia Deroma, at University of Connecticut. In this workshop I learned mindfulness practices shown to help focus attention, suspend judgment, foster creativity, and enhance empathy and compassion.

SEP 29, 2017 Participated in the *Helping STEM students develop high-level skills* workshop led by Richard Felder, at University of Connecticut. In this workshop I learned strategies for STEM faculty members to help students acquire and improve skills in analytical problem solving, critical and creative thinking, communication, and teamwork.

SEP 30, 2010 Attended the presentation *The Element: How finding your passion changes everything* by Sir Ken Robinson at Kansas State University.