

# N. Rich Nguyen

+1 (703) 541 8442 • [nn4pj@virginia.edu](mailto:nn4pj@virginia.edu)  
<https://www.cs.virginia.edu/~nn4pj/>

## A. PROFESSIONAL APPOINTMENTS

---

**Assistant Professor, Academic General Faculty** **Aug 2018 – present**  
*Dept of Computer Science, SEAS, University of Virginia* *Charlottesville, VA*

- Develop and implement instructional materials for the graduate and undergraduate Machine Learning courses enrolled by 97 graduates and over 980 undergraduates in 8 semesters.
- Collaborate with 2 instructors to manage a large course of 500+ CS students.
- Guide and mentor over 220 teams of students in the Machine Learning for Virginia projects.
- Co-supervise a team of 35+ undergraduate TAs to support a large group of CS students.
- Evaluate, monitor and mentor 56 undergraduate student academic progress.
- Serve and support functional activities of diversity and student engagement departmental committees.

**Lecturer and Career Manager** **Feb 2014 – Aug 2018**  
*College of Computing and Informatics, UNC Charlotte* *Charlotte, NC*

- Served as the coordinator for four major aspects of the college experience (recruitment, engagement, internships, and placement) with faculty members across three departments.
- Taught the Computing Professionals Series, a comprehensive seminar to help streamline undergraduate student engagement with average enrollment of over 250 students per semester.
- Managed a total budget of \$375,000 over the past 3 years allocated among several student services.
- Oversaw a tutoring center of 10 tutors to serve over 3,500 individual sessions a year.
- Established the Industry Panels emphasizing the collaboration with 20+ industry partners (including 5 Fortune 500 companies) to focus on the most important aspects of early professional development.
- Published weekly newsletters to keep CS students connected to on-campus opportunities with over 42% readership (compared to industry average of 17%).

## B. EDUCATION

---

**Ph.D. in Computing and Information Systems** **Dec 2016**  
*University of North Carolina at Charlotte* *Charlotte, NC*

Dissertation Title: Reducing Training Effort in Biological Image Classification Systems  
Advising Committee: Min Shin, Richard Souvenir, Andrew Willis, Zbyszek Ras, and Mark Clemens

**M.S. in Computer Science** **Dec 2009**  
*University of North Carolina at Charlotte* *Charlotte, NC*

Thesis Title: Tracking Colliding Cells *in vivo* Microscopy Video  
Advising Committee: Min Shin, Richard Souvenir, and Toan Huynh

**B.A. in Mathematics, Concentration in Statistics** **May 2008**  
*University of North Carolina at Charlotte* *Charlotte, NC*  
*Magna Cum Laude* (GPA 3.91)

**B.S. in Computer Science, Concentration in Intelligent Systems** **Dec 2007**  
*University of North Carolina at Charlotte* *Charlotte, NC*  
*Magna Cum Laude* (GPA 3.92)

## C. HONORS/AWARDS

---

<b>All-University Teaching Award:</b> Department Nominee, University of Virginia	2021
<b>Google Faculty Award:</b> Machine Learning Education with TensorFlow 2.0, Google Inc.	2019
<b>Faculty Innovation Award:</b> College of Computing and Informatics, UNC-Charlotte	2018
<b>Best Research Talk:</b> Natural Science, Graduate Research Symposium, UNC-Charlotte	2013
<b>First Place in Computing and Informatics:</b> Graduate Research Fair, UNC-Charlotte	2012
<b>First Place in Computer Science:</b> Graduate Research Fair, UNC-Charlotte	2011
<b>Research Assistant of the Year:</b> Future Computing Lab (FCL), UNC-Charlotte	2010
<b>First Place in Multidisciplinary Research:</b> Graduate Research Fair, UNC-Charlotte	2009
<b>First Place in Algebra II:</b> ICTM Regional Math Contest, Urbana–Champaign, IL	2003

## D. RESEARCH GRANTS

---

- **PI** with Tho Nguyen, and Ron Hutchins. EAGER: Distributed Data-Sharing for Fast Response and Decision Support. NSF Award #2026050. (June 2020 - June 2024). Award: \$315,600.
- **Co-Investigator** with Glen Bull and Ryan Novitski. NSF Pathways for Open-Source Ecosystems (POSE) Phase I Grant on Establishing an Ecosystem for Open-Source Educational CAD Models (NSF #230830). Start Date: 01/01/2023 End Date: 12/31/2023. Total Award: \$288,000.
- **Co-PI** with Glen Bull, Joe Garofalo and James Cohoon. Collaborative Research: Introducing High-school Students to Computational Thinking in Industrial Automation. NSF STEM+C Award #1842342. (January 2019 - December 2022). Award: \$933,640.
- **Co-PI** with Glen Bull. Developing a Repository for Educational Models. SEHD IDEA (June 2022 - May 2023). Amount: \$10,000.
- **PI** with Christopher Moore. DeepDiag: An Explainable Deep Learning Framework to Diagnose Bloodstream Infection. Submitted to UVA Center of Engineering in Medicine (Oct 2021 - Dec 2022). Amount: \$74,710.
- **Co-PI** with Glen Bull and Luke Dalh. Scaling an Introduction to Coding through the Arts. UVA 3Cavaliers (June 2021 - May 2022). Amount: \$60,000.
- **Co-PI** with Christopher Moore and Randall Moorman. Collaborative Seed Grant: Determining predictive models of bloodstream infection by using big data and deep learning. Sponsored by UVA Global Infectious Diseases Institute (Apr 2020 - Aug 2021). Award: \$100,000.
- **Co-PI** with Glen Bull. University Seminar: Making Art, Animations, and Music at the Intersection of the Digital and Physical Worlds. Office of the Executive Vice President and Provost, UVA. (January 2021 - June 2021) Award: \$6,000.
- **Co-PI** with Glen Bull. Incorporating Computational Thinking into Maker Education. Sponsored by Thrive Grant. Center for Teaching Excellence, UVA, (Jan 2020 - Jun 2020). Award: \$5,000.
- **PI.** Machine Learning Education with Tensorflow 2.0. Sponsored by Google Faculty Award. (August 2019 - August 2020). Award: \$12,000.
- **PI.** CodeNC: Integrating Computational Thinking into High School Curriculum. Sponsored by Faculty Innovation Award. College of Computing and Informatics, UNC Charlotte. (January 2018 - Jun 2018). Award: \$20,000.

## E. PUBLICATIONS

---

### Books.....

- [1] Bull, G., Gibson, R., Watts, J., **Nguyen, N.R.** & Dahl, L. (2023) TUNESCOPE Creating Digital Music in Snap! Waynesville, NC USA: Association for the Advancement of Computing in Education (AACE).
- [2] Bull, G., Watts, J., **Nguyen, N. R.** (2021) Designing Art, Music, and Animations. 2nd Edition. Waynesville, NC USA: Association for the Advancement of Computing in Education (AACE).
- [3] Bull, G., Watts, J., **Nguyen, N. R.**, Bull, G., Kallam, A. (2020) Creating Art, Animations, and Music through Coding. Waynesville, NC USA: Association for the Advancement of Computing in Education (AACE).
- [4] Bull, G., Garofalo, J., **Nguyen, N. R.** (2019) An Introduction to Computational Thinking Through Art, Music, and Games. Society for Information Technology & Teacher Education.

### Refereed Journal Articles.....

- [5] Bull, G., **Nguyen, N. R.**, Watts, J., Gibson, R., Littman, M. (2022) Reflection: "Twenty things to do with a computer" revisited. Contemporary Issues in Technology and Teacher Education, 22(1), 228-242.
- [6] Bull, G., Garofalo, J., **Nguyen, N. R.** (2020) Thinking about computational thinking, Journal of Digital Learning in Teacher Education, 36:1, 6-18. (Impact Factor: 1.871)
- [7] Norris, E. J., Feilen, N., **Nguyen, N. R.**, Culberson, C. R., Shin, M. C., Fish, M., & Clemens, M. G. (2013). Hydrogen sulfide modulates sinusoidal constriction and contributes to hepatic microcirculatory dysfunction during endotoxemia. American journal of physiology. Gastrointestinal and liver physiology, 304(12), G1070–G1078. (Impact Factor: 4.406)
- [8] **Nguyen, N. R.**, Keller, S., Norris, E., Huynh, T. T., Clemens, M. G., & Shin, M. C. (2011). Tracking colliding cells in vivo microscopy. IEEE transactions on bio-medical engineering, 58(8), 10.1109/TBME.2011.2158099. (Impact Factor: 4.424)
- [9] Huynh, T., **Nguyen, N. R.**, Keller, S., Moore, C., Shin, M. C., & McKillop, I. H. (2010). Reducing leukocyte trafficking preserves hepatic function after sepsis. The Journal of trauma, 69(2), 360–367. (Impact Factor: 3.403)

### Refereed Conference Proceedings.....

- [10] Gupta, A., Karande, A., **Nguyen, N. R.**, & Nguyen, T. (2023). Predicting Flood Severity in Indonesia based on Historical Flooding Events and Time-Series Information. In Proceedings of the AAAI Workshop on AI to Accelerate Science and Engineering (AI2ASE) at the 37th Association for the Advancement of Artificial Intelligence (AAAI) Conference, Washington, DC, USA. Feb 7-14, 2023.
- [11] Param Damle, Glen Bull, Jo Watts, and **N. Rich Nguyen**. (2023). Automated Structural Evaluation of Block-based Coding Assignments. In Proceedings of the 54th ACM Technical Symposium on Computer Science Education (SIGCSE 2023). Association for Computing Machinery, New York, NY, USA.

- [12] Harsh Padhye, Rachel Gibson, Glen Bull, and **N. Rich Nguyen**. (2023). Does Musical Context Improve Computational Thinking Skills? In Proceedings of the 54th ACM Technical Symposium on Computer Science Education V. 2 (SIGCSE 2023). Association for Computing Machinery, New York, NY, USA.
- [13] Watts, J., Gibson, R., Jones, M., Bull, G. and **Nguyen, N. R.** (2022). Creating Music through Coding. In E. Langran (Ed.), Proceedings of Society for Information Technology and Teacher Education International Conference (p. 102), Waynesville, NC USA. **(Best Poster Award)**.
- [14] Gupta A., Kim A., Karande A., Yan S., Manandhar S., and **Nguyen, N. R.** (2022). Validating Crowdsourced Flood Images Using Machine Learning and Real-Time Weather Data. In Proceedings of the 16th IEEE International Conference on Big Data Science and Engineering, Wuhan, China Oct 28-30, 2022. **(Best Paper Award)**.
- [15] Boner Z., and **Nguyen, N. R.** (2022). Deep Learning Risk Prediction of Bloodstream Infection in the Intensive Care Unit. In Proceedings of KDD Undergraduate Consortium, Washington, DC. Aug 14-18, 2022.
- [16] Gupta A., and **Nguyen, N. R.** (2022). Predicting and Visualizing Tidal Trends in Vietnam using an Automated Geographical Data Pipeline. In Proceedings of KDD Undergraduate Consortium, Washington, DC. Aug 14-18, 2022.
- [17] **Nguyen, N. R.**, Padhye, H., Stein, E., Bull, G. (2022). TuneScope: Engaging Novices to Computational Thinking through Music. In Proceedings of the 53rd ACM Technical Symposium on Computer Science Education (SIGCSE '22). Association for Computing Machinery, New York, NY, USA.
- [18] **Nguyen, N. R.** (2020). Toward an Open-source Toolkit for Machine Learning Education. In Proceedings of the 51st ACM Technical Symposium on Computer Science Education (SIGCSE '20). Association for Computing Machinery, New York, NY, USA, 1400. (Acceptance Rate: 35%)
- [19] **Nguyen, N. R.**, Poliakova, I. , Meduri, S., Hutcheson, J., and Ke, R. (2019). CodeNC: Integrating Computational Thinking into K-12 Instructional Activities using Animated Videos. In Proceedings of the 50th ACM Technical Symposium on Computer Science Education (SIGCSE '19). Association for Computing Machinery, New York, NY, USA, 1276. (Acceptance Rate: 32%)
- [20] **Nguyen, N. R.** (2018). Affective Peer Tutoring: (Abstract Only). In Proceedings of the 49th ACM Technical Symposium on Computer Science Education (SIGCSE '18). Association for Computing Machinery, New York, NY, USA, 1085. (Acceptance Rate: 35%)
- [21] **Nguyen, N. R.** & Shin, M. C. (2017, March). Detecting Social Insects in Videos Using Spatiotemporal Regularization. In 2017 IEEE Winter Conference on Applications of Computer Vision (WACV) (pp. 493-500). IEEE. (Acceptance Rate: 39%)
- [22] Schmutz, S.J., Rice, L., **Nguyen, N.R.**, Lindberg, J., Grizzi, R., Joffe, C., & Shin, M.C. (2016, March). Detection of cracks in nuclear power plant using spatial-temporal grouping of local patches. 2016 IEEE Winter Conference on Applications of Computer Vision (WACV), 1-7. (Acceptance Rate: 34%)
- [23] Schmutz, S. J., **Nguyen, N. R.**, Thao, C., Lindberg, J., Grizzi, R., Joffe, C., & Shin, M. C. (2014, October). Automatic detection of cracks during power plant inspection. In Proceedings

of the 2014 3rd International Conference on Applied Robotics for the Power Industry (pp. 1-5). IEEE. (Acceptance Rate: 33%)

- [24] **Nguyen, N. R.**, Donalson-Matasci, M., & Shin, M. C. (2013, January). Improving pollen classification with less training effort. In 2013 IEEE Workshop on Applications of Computer Vision (WACV) (pp. 421-426). IEEE. (Acceptance Rate: 37%)
- [25] **Nguyen, N. R.**, Norris, E., Clemens, E. M., and Shin, M. C. (2011, September). Rapidly adaptive cell detection using transfer learning with a global parameter. In Proceedings of the Second international conference on Machine learning in medical imaging (MLMI'11). Springer-Verlag, Berlin, Heidelberg, 209–216. (Acceptance Rate: 39 %)
- [26] **Nguyen, N. R.**, Keller, S., Huynh, T., & Shin, M. (2009, December). Tracking colliding cells. In 2009 Workshop on Applications of Computer Vision (WACV) (pp. 1-7). IEEE. (Acceptance Rate: 47%)
- [27] Schmutz, S. J., Keller, S., **Nguyen, N. R.**, Souvenir, R., Huynh, T., Clemens, M., & Shin, M. C. (2008, September). Segmentation of vessels cluttered with cells using a physics based model. In International Conference on Medical Image Computing and Computer-Assisted Intervention (pp. 127-134). Springer, Berlin, Heidelberg. (Acceptance Rate: 35%)

#### **Technical Reports**.....

- [28] Bull, G., Watts, J., **Nguyen, N.R.** (2021) "Creating Art through Coding." In proceedings at the Snap!Con 2021. July 29 - Aug 01, 2021, online. Retrieved February 14, 2022 from <https://www.snapcon.org/conferences/2021/program/proposals/288>.
- [29] Norris, E., Culberson, C., **Nguyen, N. R.**, Shin, M. C., and Clemens, M. (2012, November). Hydrogen Sulfide Increases Hepatic Perfusion Heterogeneity via an Acute Constrictor Effect in Endotoxemia. In the 63<sup>rd</sup> Annual Meeting of The American Association for the Study of Liver Diseases (**The Liver Meeting**), Boston, Massachusetts.
- [30] Norris, E., Culberson, C., **Nguyen, N. R.**, Shin, M. C., and Clemens, M. (2011, November) Hydrogen Sulfide Contributes to Hepatic Microcirculatory Dysfunction During Endotoxemia. In the 62<sup>nd</sup> Annual Meeting of The American Association For the Study of Liver Diseases (**The Liver Meeting**), San Francisco, California.
- [31] **Nguyen, N. R.** (2009). Age Progression Using Image Morphing. Technical Report in *Computational Photography, ITCS 6110*, UNC Charlotte.
- [32] Kumar, C., Gour, M., **Nguyen, N. R.** (2008). Use case Specifications: Dance Competition Management System (DCMS). Technical Report in *Software Engineering, ITCS 6112*, UNC Charlotte.
- [33] **Nguyen, N. R.** (2007) Understanding Tracking and StroMotion of a Soccer Ball. Technical Report in *Computer Vision, ITCS 5142*, UNC Charlotte.

#### **Invited Presentations**.....

- [34] **Nguyen, N. R.**, Praphamontripong, U. (2019, March). Diversity, Equity, and Inclusion Skits. CS Education Practicum (CS 2910). Computer Science Department. University of Virginia.

- [35] **Nguyen, N. R.** (2019, October). What it means to be a Ph.D. candidate. Panel Discussion. Ph.D. Open House. College of Computing and Informatics. UNCC.
- [36] **Nguyen, N. R.** (2018, November). What makes you resume standout. CS Education Practicum (CS 2910). Computer Science Department. University of Virginia.
- [37] **Nguyen, N. R.** (2017, March). Creating a Diversity Chain to Raise Culture Awareness among CS Students. Prospect for Success (PFS) Charrette, Charlotte.
- [38] **Nguyen, N. R.** (2016, March). Hosting Industry Panels to Promote Professional Development in Computer Science. Prospect for Success (PFS) Charrette, Charlotte.
- [39] **Nguyen, N. R.** (2013, March). Improving Pollen Classification with Less training effort. Graduate Research Symposium, UNCC.
- [40] **Nguyen, N. R.** (2012, April). Gameplay: Motivating college students in the classroom," Center of Graduate Life, UNCC.
- [41] **Nguyen, N. R.** (2012, November). How to organize research papers. CCI GRADS, UNCC.
- [42] **Nguyen, N. R.** (2012, March). Rapidly adaptive cell detection," Graduate Research Symposium, UNCC.
- [43] **Nguyen, N. R.** (2011, April). Tracking cells in vivo microscopy," Graduate Seminar, UNCC.
- [44] **Nguyen, N. R.** (2010, June). Tracking colliding cells," NSF REU Symposium, UNCC.
- [45] **Nguyen, N. R.** (2010, May). Programming style guidelines," Future Computing Lab, UNCC.
- [46] **Nguyen, N. R.** (2009, July). Cell tracking in microscopy videos," Carolina Medical Center.

**Dissertation/Thesis**.....

- [47] **Nguyen, N. R.** (2016). Reducing training effort in biological image classification (Doctoral dissertation, The University of North Carolina at Charlotte).
- [48] **Nguyen, N. R.** (2009). Tracking Colliding Cells in Intravital Video Microscopy (Master Thesis, The University of North Carolina at Charlotte).

**Citations**.....

**H-index:** 7 (i10-index: 7). On Google Scholar. *May 2023*  
**Citation Count:** 186. On Google Scholar. *May 2023*

**F. STUDENTS**

---

**Graduate Students**.....

**San, Aidan - PhD Candidate:** Interpretability NLP (Committee) *Current*  
**Mostafavi, Moeen, PhD:** Emotion Understanding in Messaging (Committee) *Spring 2023*  
**Gumbabay, Ethan - MS:** Deep Reinforcement Learning in Hint Generation *Fall 2022*  
**Sutton, Andrew, PhD:** NOvA Event Reconstruction (Committee) *Spring 2022*  
**Sahbai, Parima - MCS:** Integration of Computational Thinking within K-12 *Spring 2019*

<b>Wu, Jibang - MS:</b> Attention Mechanism for Recommendation (Committee)	<i>Spring 2019</i>
<b>Undergraduate Students</b> .....	
<b>Santamaria, Chris - BA:</b> Undergraduate Capstone Research	<i>Fall 2022</i>
<b>Tapp, Joshua - BS:</b> Undergraduate Capstone Research	<i>Fall 2022</i>
<b>Liu, Sara - BS:</b> Undergraduate Capstone Research	<i>Fall 2022</i>
<b>Edwards, Louisa - BA:</b> Independent Study Research	<i>Spring 2022</i>
<b>Gupta, Ankit - BS:</b> Independent Study Research	<i>Spring 2022</i>
<b>Padhye, Harsh - BA:</b> Distinguished BA Major Research	<i>Spring 2022</i>
<b>Kim, Adriel - BS:</b> Undergraduate Capstone Research	<i>Spring 2022</i>
<b>Stein, Eric - BS:</b> Undergraduate Capstone Research	<i>Fall 2021</i>
<b>Jung, Christian - BS:</b> Undergraduate Capstone Research	<i>Fall 2021</i>
<b>Yuxin, Wu - BS:</b> Undergraduate Research Assistant	<i>Spring 2020-Spring 2021</i>
<b>Xu, David - BS:</b> Undergraduate Research Assistant	<i>Fall 2020-Spring 2021</i>
<b>Jahromi, Navid - BS:</b> Undergraduate Capstone Research	<i>Fall 2020-Spring 2021</i>
<b>Marcus, Adam - BS:</b> Undergraduate Capstone Research	<i>Fall 2020-Spring 2021</i>
<b>Harris, Arthur - BS:</b> Undergraduate Capstone Research	<i>Fall 2020</i>
<b>Newton, Nicholas - BA:</b> Independent Study	<i>Spring 2020</i>
<b>Kim, Cory - BS:</b> Undergraduate Capstone Research	<i>Spring 2020</i>
<b>Nanda, Siddharth - BS:</b> Undergraduate Capstone Research	<i>Spring 2020</i>
<b>Maguire, Mark - BS:</b> Undergraduate Capstone Research	<i>Spring 2020</i>
<b>Wang, Daniel - BS:</b> Undergraduate Capstone Research	<i>Fall 2019</i>
<b>Kosolwattana, Arty - BS:</b> Undergraduate Capstone Research	<i>Fall 2019</i>
<b>Goel, Siddhant - BS:</b> Undergraduate Capstone Research	<i>Fall 2019</i>
<b>Flores, Jimmy - BS:</b> Undergraduate Capstone Research	<i>Spring 2019</i>
<b>Ballard, Kyra - BS:</b> Undergraduate Capstone Research	<i>Spring 2019</i>
<b>Visitors/ PostDoctoral Fellows</b> .....	
<b>Zimmet, Amanda - PhD:</b> Post-Doctoral Researcher Fellow, CAMA	<i>Spring 2020-Spring 2021</i>
<b>Qiu, Jiaying - MS:</b> Data Scientist, CAMA	<i>Fall 2020-present</i>

## G. SERVICE ACTIVITIES

<b>Department Service</b> .....	
<b>Member:</b> Diversity and Inclusion Committee	<i>2018-present</i>
<b>Member:</b> Department Chair Search Committee	<i>2020-2021</i>
<b>Workshop Facilitator:</b> Diversity and Inclusion Training Skits for new TAs	<i>March 2019</i>
<b>Co-Advisor:</b> Association of Computing Machinery (ACM) Student Chapter	<i>2018-present</i>
<b>Academic Advisor:</b> Advised 56 students (CS, BACS, First-year SEAS)	<i>2020-2021</i>
<b>Academic Advisor:</b> Advised 50 students (CS, BACS, First-year SEAS)	<i>2019-2020</i>
<b>Academic Advisor:</b> Advised 25 students (CS, BACS, First-year SEAS)	<i>2018-2019</i>

<b>School Service</b> .....	
<b>Booth Organizer:</b> UVA Booth, Grace Hopper Celebration, Orlando, FL	<i>October 2019</i>
<b>Faculty Liason:</b> SEAS Students visiting Google, New York, NY	<i>April 2019</i>
<b>University Service</b> .....	
<b>Co-organizer:</b> UVA Annual High School Programming Contest (HSPC)	<i>2018-present</i>
<b>Faculty Advisor:</b> HooHacks Student Hackathon	<i>2021-present</i>
<b>Advisor:</b> Google Developer Student Club (Google DSC)	<i>2019-2021</i>
<b>Faculty Advocate:</b> Data Palooza, School of Data Science	<i>2019-2021</i>

## H. PROFESSIONAL ACTIVITIES

---

<b>Reviewer:</b> IEEE Access Multidisciplinary Open Access Journal (ISSN 2169-3536)	<i>2023</i>
<b>Organizer:</b> The Inaugural International Symposium for ASEAN Smart Cities	<i>2022</i>
<b>Reviewer:</b> MDPI Journal of Tropical Medicine and Infectious Disease (ISSN 2414-6366)	<i>2022</i>
<b>Reviewer:</b> MDPI Journal of Healthcare (ISSN 2227-9032)	<i>2022</i>
<b>Reviewer:</b> Educational Advances in Artificial Intelligence (EAAI)	<i>2022</i>
<b>Reviewer:</b> Winter Conference on Applications of Computer Vision (WACV)	<i>2022</i>
<b>Reviewer:</b> MDPI Journal of Environmental Research and Public Health (ISSN 1660-4601)	<i>2022</i>
<b>Review Committee:</b> Swiss National Science Foundation (SNSF)	<i>2021</i>
<b>Reviewer:</b> MDPI Journal of Mathematics (ISSN 2227-7390)	<i>2021</i>
<b>Reviewer:</b> MDPI Journal of Environmental Research and Public Health (ISSN 1660-4601)	<i>2021</i>
<b>Judge:</b> Virginia State Science and Engineering Fair - Biomedical Engineering (ENBM)	<i>2021</i>
<b>Moderator:</b> ACM SIGCSE, Toward an open-source toolkit for Machine Learning Education	<i>2020</i>
<b>Organizing Panelist:</b> National Technology Leadership Summit (NTLS), Maker Strand	<i>2020</i>
<b>Panelist:</b> What it means to be a doctoral candidate, PhD Open House , Charlotte, NC	<i>2019</i>
<b>Participant:</b> STARS Ignite, STARS Computing Corp , Orlando, FL	<i>2019</i>
<b>Member:</b> Association for Computing Machinery (ACM)	<i>2005-present</i>
<b>Member:</b> ACM Special Interest Group in Computer Science Education (SIGCSE)	<i>2018-present</i>