

Dale-Marie Wilson, Ph.D.

University of North Carolina Charlotte
Department of Software and Information
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Educational Background

Doctor of Philosophy in	2006	Auburn University, Auburn, Alabama	<i>Focus:</i> Databases, Human- Computer Interaction,
Computer Science		<i>Title:</i> I-Tech: An Interactive Technical Assistant	Multimodal Interfaces, Voice Interfaces, Intelligent Tutoring Systems
Master of Science in	2003	Auburn University, Auburn, Alabama	<i>Focus:</i> Databases, Voice Interfaces, Multimodal Interfaces,
Computer Science		<i>Title:</i> Multimodal SQL – An Implementation and Usability Study	Human-Computer Interaction
Bachelor of Science	1995	New York University, New York, New York Science	<i>Major:</i> Mathematics <i>Minor:</i> Computer

Professional History

Teaching Professor	University of North Carolina Charlotte (Charlotte, NC) Software and Information Systems Department	2022 - present
Teaching Associate Professor	University of North Carolina Charlotte (Charlotte, NC) Software and Information Systems Department	2014- 2022
Assistant Professor	University of North Carolina Charlotte (Charlotte, NC) Computer Science Department	2006 – 2014
Graduate Research Assistant	Auburn University (Auburn, AL) Graduate Assistance in Areas of National Need (GAANN) <ul style="list-style-type: none">• Developed Intelligent Tutoring System• Guest Instructor (Database Systems, Multimodal User Interfaces, User Interface Design and Evaluation)	2003 – 2006

Graduate Research Assistant	Auburn University (Auburn, AL) NSF-ITR: New Approaches to Human Capital Development through Information Technology Research (#0296269)	2001 – 2003
Programmer	Sigma Computer Services, LLC (New York, NY) <ul style="list-style-type: none"> • Program Design and Development in COBOL and Visual Basic • Database Management 	1996 - 2001

Certifications

Quality Matters

Independent Applying the QM Rubric (APPQMR): (Statewide Systems) **August 2017**

Career Highlights & Awards

CCI Special Contributions to Equity and Inclusion in Computing Award 2023
College of Computing and Informatics
University of North Carolina Charlotte

Outstanding Community Service Award 2023
Alumni Achievement Award
College of Computing and Informatics
University of North Carolina Charlotte

Invited Presentation to Rear Admiral Christina M. Alvarado 2015
<https://www.youtube.com/watch?v=yN-YY6VC74>
College of Health and Human Services
University of North Carolina Charlotte

Excellence in Undergraduate Teaching Award 2014
College of Computing and Informatics
University of North Carolina Charlotte

Grey's College Faculty Development Award 2011
University of North Carolina Charlotte

Essam El-Kwae Student-Faculty Research Award 2008
College of Computing and Informatics
University of North Carolina Charlotte

Publications

Peer Reviewed Journal Publications

(10 – 19% Acceptance Rate)

Gilbert, J.E. & Wilson, D. & Gupta, P. (2005) **Learning C With Adam**. *International Journal on E-Learning*, 4,3, Association for the Advancement of Computing in Education. pp. 337-350.

Peer Reviewed Conference Publications

Marlon Mejias, Dale-Marie Wilson, Gloria Washington, Felesia Stukes, Jody Marshall, **Luce-Melissa Kouaho**, 2022. *A Social Justice Approach to Computer Science Research & Black Undergraduate Students*. (RESPECT, 2022).

R. Sakpal, D. Wilson, C. Elnitsky, K. Taber and T. W. Brearly, "**Virtual Standardized Patient as a Training Tool for Mild TBI Screening**," 2016 IEEE International Conference on Healthcare Informatics (ICHI), 2016, pp. 113-117, doi: 10.1109/ICHI.2016.19. (*Best paper Nomination*)

Jordine, K., Wilson, D.-M., & Sakpal R. (2013) **What is Age's Effect in Collaborative Learning Environments?** *Lecture Notes in Computer Science*, 96-103. Doi:10.1007/978-3-642-39191-0 11.

Jordine, K., Wilson, D.M., Jensen, A. & Sakpal, R. (2012). **Embodied Conversational Agents in Online Collaborative Learning Environments**. In T. Amiel & B. Wilson (Eds.), *Proceedings of EdMedia 2012--World Conference on Educational Media and Technology* (pp. 925-930). Denver, Colorado, USA: Association for the Advancement of Computing in Education (AACE). Retrieved September 1, 2021 from <https://www.learntechlib.org/primary/p/40864/>.

Jensen, A., Wilson, D.M., Jordine, K. & Sakpal, R. (2012). **Using Embodied Pedagogical Agents and Direct Instruction to Improve Learning Outcomes for Young Children with Learning Disabilities**. In *Proceedings of Global TIME -Online Conference on Technology, Innovation, Media & Education* (pp. 235-239). Online, Association for the Advancement of Computing in Education (AACE). Retrieved August 16, 2021 from <https://www.learntechlib.org/primary/p/39433/>.

Jensen, A., Wilson, D.M., Jordine, K. & Sakpal, R. (2012). **Detecting Elements of Culture Bias in Student Perceptions of Embodied Pedagogical Agents**. In T. Amiel & B. Wilson (Eds.), *Proceedings of EdMedia 2012--World Conference on Educational Media and Technology* (pp. 1304-1310). Denver, Colorado, USA: Association for the Advancement of Computing in Education (AACE). Retrieved August 16, 2021 from <https://www.learntechlib.org/primary/p/40919/>.

Jr, Carl & Wilson, Dale-Marie & Lehmann, Lorrie. (2011). **Improving performance and retention in computer science courses using a virtual game show**. *Proceedings of the 49th Annual Southeast Regional Conference*, 2011, Kennesaw, GA, USA, March 24 – 26, 2011.

R. Sakpal and D. Wilson, "**Virtual game show host — Dr. Chestr**," 2011 IEEE Virtual Reality Conference, 2011, pp. 237-238, doi: 10.1109/VR.2011.5759486.

Sakpal, R. and Wilson, DM. **Can Culture Translate to the Virtual World?**. *HCI International 2011 – Communications in Computer and Information Science*, 2011, Volume 173, Part III, 242-246, DOI: 10.1007/978-3-642-22098-2 49.

Alvarez, Ignacio & Martin Hammond, Aqueasha & Dunbar, Jerone & Taiber, Joachim & Wilson, Dale-Marie & Gilbert, Juan. (2010). **Voice interfaced vehicle user help**. 42-49. 10.1145/1969773.1969782.

Jensen, A. & Wilson, D.M. (2010). **The Impact of Teacher/Administrator Perceptions of Risk on the Adoption and Use of Intelligent Tutoring Systems in U.S. Schools**. In J. Sanchez & K. Zhang (Eds.), *Proceedings of E-Learn 2010--World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 1841-1849). Orlando, Florida, USA: Association for the Advancement of Computing in Education (AACE). Retrieved August 16, 2021 from <https://www.learntechlib.org/primary/p/35822/>

Wilson, Dale-Marie & Martin Hammond, Aqueasha & Gilbert, Juan. (2010). **'How may I help you'- Spoken queries for technical assistance**. Proceedings of the Annual Southeast Conference. 43. 10.1145/1900008.1900068.

Cairco Dukes, Lauren & Wilson, Dale-Marie & Fowler, Vicky & LeBlanc, Morris. (2009). **AVARI: Animated virtual agent retrieving information**. Proceedings of the 47th Annual Southeast Regional Conference, ACM-SE 47. 10.1145/1566445.1566468.

B. Marshall and D. Wilson, "**Applying Aggregation Concepts for Image Search**," 2008 Tenth IEEE International Symposium on Multimedia, 2008, pp. 328-333, doi: 10.1109/ISM.2008.80.

Gupta, P., Seals, C. & Wilson, D.M. (2006). **Design And Evaluation of SimBuilder**. In T. Reeves & S. Yamashita (Eds.), *Proceedings of E-Learn 2006--World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 205-210). Honolulu, Hawaii, USA: Association for the Advancement of Computing in Education (AACE). Retrieved August 16, 2021 from <https://www.learntechlib.org/primary/p/23685/>.

Wilson, Dale-Marie (2004). **Multimodal programming for dyslexic students**. Proceedings of the 6th International Conference on Multimodal Interfaces, State College, PA, USA, October 12-15, 2004.

Gilbert, J. E. & Wilson, D. (2001). **Building Learning Architectures: Domain Instruction Server (DIS)**. In *Proceedings of WebNet 01: World Conference on the WWW and Internet*, Orlando, FL: Association for the Advancement of Computing in Education, pp. 422-426

J. E. Gilbert and D. M. Wilson, "**Domain Instruction Server (DIS)**," *Proceedings IEEE International Conference on Advanced Learning Technologies*, 2001, pp. 439-440, doi: 10.1109/ICALT.2001.943970.

Peer Reviewed Posters

Mohammed Ahmed, Raghavi Sakpal, Dale-Marie Wilson, David Cifu, Joel Scholten, Chloe A. Bomberger, Robin A. Hurley, Christine Elnitsky, Katherine H. Taber. (2014) **Creating a Virtual Mild TBI Patient: Conceptual Design and Initial Database Development**, American Neuropsychiatric Association 2014 (ANPA).

Jordine, K., Wilson, D, and Sakpal, R. (2014) **Logic Analyzer of Computer Programs using Relational Model**, HCI International 2014.

Peer Reviewed Workshops

Jensen, A. S., Jordine, K., Sakpal, R. and Wilson, Dale-Marie. (2011) **Using Embodied Pedagogical Agents to Augment Learning and cognition in Young Children with Special Needs**, ACM CHI Conference on Human Factors in Computing Systems - Child Computer Interaction Workshop, 7 May 2011.

Wilson, D. **Answers First: A Human-Centered Approach to Call Centers**, 2007 National BDPA Technology Conference, August 15 -18, 2007.

Gilbert, J.E., Wilson, D. & Gupta, P., **Evaluating Voice User Interfaces Workshop**, SpeechTEK Conference, August 1, 2005, (BDPA 2003 25th Annual National Conference).

An Introduction to VoiceXML and SALT: Adding voice to data
Philadelphia, PA (August 13 – 17 2003).

(BDPA 2003 25th Annual National Conference) **African American Distributed Multiple Learning Styles System: A Culture-specific Approach to ELearning**, Philadelphia, PA (August 13 – 17 2003).

Other Publications

Bloom, J., Gilbert, J.E., Houwing, T., Hura, S., Issar, S., Kaiser, L., Larson, J.A., Leppik, D., Mailey, S., Mane, A., McTernan, F., McTear, M., Pollock, S., Shinn, P., Stifelman, L. & Wilson, D. **Ten Criteria for Measuring Effective Voice User Interfaces**, speechTECHNOLOGY, November/December 2005, pp. 31- 35.

Invited Talks

Wilson, D. **Tiffany Turnup Explores STEM careers Black History edition**. (Feb 28, 2023)
<https://www.youtube.com/watch?v=VH68G1qTjxY&feature=youtu.be>

Wilson, D. **STEM Pre-College Academy – A Day is the Life of a Scientist**. (Oct 2022)

Wilson, D. **Development of a mTBI virtual standardized patient**. Rear Admiral Christina M. Alvarado Visit to the College of Health and Human Services, University of North Carolina Charlotte, 2015.
<https://www.youtube.com/watch?v=yN-YY6VC74>

African American Researchers in Computing Sciences 2007 Conference – AARCS **Life of a New Professor**, Auburn, Alabama (July 19 – 21, 2007)

Wilson, D. **Answers First: A Human-Centered Approach to Call Centers**, 2007 National BDPA Technology Conference, August 15 - 18, 2007.

(Presentation) **iTech: An Interactive Technical Assistant, Baltimore County, Maryland**
(April 24 – 25, 2006) University of Maryland,
Baltimore County

(6th Annual Arizona More Graduate Education at Mountain States
Alliance (MGE@MSA) Student Research Conference and Graduate
Fair) **iTech: An Interactive Technical Assistant**, Arizona State
University (April 21, 2006).

African-American Researchers in Computing Sciences 2006) **The Post
Ph.D. Job Search**, Auburn AL (July 20 – 22, 2006)

Brothers of the Academy Think Tank 2006) **Reaching In and
Pulling Out**, Atlanta, GA (October 4 – 7, 2006)

(5th Annual Arizona More Graduate Education at Mountain States Alliance (MGE@MSA)
Student Research Conference and Graduate Fair) **African American Distributed
Multiple Learning Styles System: A Culture-specific Approach to ELearning**,
Arizona State University (April 18, 2005).

(Richard Tapia Celebration of Diversity in Computing Conference
2005) **I- Assist: An Interactive Technical Assistant**,
Albuquerque, New Mexico (October 19 – 22, 2005) **Doctoral
Consortium**

Richard Tapia Celebration of Diversity in Computing Conference 2005) **Making the
Journey of Graduate School Your Own: Success at Your Own Risk**, Albuquerque, New
Mexico (October 19 – 22, 2005)

Panels

Wilson, D., Schlueter, J., Farklaris, C., Fan, L. **Picture a Scientist**,
UNCC (Mar 14, 2023)

Stukes, F., Wilson, D. **Computing & US**. blackcomputeHer Annual
Conference 2022. [https://blackcomputeher.org/2022-conference-
agenda/](https://blackcomputeher.org/2022-conference-agenda/)

Extramural Funding

Peer Reviewed National and International Grants

Funded

Title: Culturally and Socially Relevant research and black Undergraduate Students (CSR & US)

Sponsor: National Science Foundation (NSF) – Racial Equity in STEM Education

Division: Graduate Education

Duration: 3 years

Requested amount: **\$773,496** [UNCC Share]

Collaborators: Dr. Marlon Mejias (University of North Carolina at Charlotte); Dr. Felesia Stukes (Johnson C. Smith University); Dr. Gloria Washington (Howard University)

Funded

Title: **The UNC Charlotte GAANN Fellowship Program in Computing and Information Systems**

Award No: P200A180040 – 19

Sponsor: US Dept of Education Graduate Assistance in Areas of National Need (GAANN)

PI: Min Shin, Ph.D.

Co-PIs: Srinivas Akella, Ph.D., Heather Lipford, Ph.D, Zbigniew Ras, D.Sc., Mohamed Shehab, PhD., **Dale-Marie Wilson, Ph.D.** (University of North Carolina Charlotte)

Amount: **\$499,155**

Duration: 5 years

Title: **Addressing the Shrinking Pipeline: On Becoming Dr. Martha Euphemia Lofton Haynes in Computer Science.**

Sponsor: Coalition to Diversify Computing.

Amount: **\$5,000**

Collaborators: Tiki L. Suarez-Brown, Ph.D. (Florida A&M University); Jamika D. Burge, Ph.D. (Capital One); Brandeis Marshal, Ph.D. (Spelman College); Enobong Hannah Branch (University of Massachusetts-Amherst).

Duration: One-time, 2009

Peer Reviewed Industrial Grants

Awarded

Title: **exploreCSR Workshop**

Sponsor: Google Research

Amount: **\$29,000**

Collaborators: Marlon Mejias, Ph.D., (UNCC); Jody Marshall, Ph.D. (UNCC); Felesia Stukes, Ph.D. (Johnson C. Smith University); Gloria Washington, Ph.D. (Howard University)

Duration: October 2021 – June 2022.

Title: **Computer Science Research & Underrepresented Support (CSR & US)**

Sponsor: Google Research

Amount: **\$15,000**

Collaborators: Marlon Mejias, Ph.D., (UNCC); Jody Marshall, Ph.D. (UNCC); Felesia Stukes, Ph.D. (Johnson C. Smith University); Gloria Washington, Ph.D. (Howard University)

Duration: October 2020 – June 2021.

Submitted

Title: Increasing Inclusivity for Blacks in Computing Research: Addressing issues within the hidden curriculum

Sponsor: Google Research – Inclusion Research Program

Amount: **\$60,000**

PI: Marlon Mejias, Ph.D.

Co-PI: Dale-Marie Wilson, Ph.D. (UNCC)

Collaborators: Jody Marshall, Ph.D. (UNCC); Felesia Stukes, Ph.D. (Johnson C. Smith University); Gloria Washington, Ph.D. (Howard University)

Peer Reviewed Institutional Grants

Funded

Title: Developing and Utilizing Culturally-Specific Virtual Humans to Increase Cultural Competence

Sponsor: Bonnie Cone Fellowship –UNC Charlotte ADVANCE Competitive Awards Program

Amount: **\$10,314**

Duration: May 2010 – June 2010.

Title: On Teaching Cultural Competence – The Virtual Patient

Sponsor: Chancellor's Diversity Fund Challenge

Amount: **\$3,900**

Duration: August 2009 – May 2010

Title: Advancing Women Faculty Careers in the College of Computing and Informatics

Sponsor: UNC ADVANCE Competitive Awards Program

PI: Jamie Payton, D.Sc..

Co-PIs: Teresa Dahlberg, Ph.D.; Tiffany Barnes, Ph.D.; Bruce Long, Ph.D.; Aidong Lu, Ph.D.; Heather Richter, Ph.D.; **Dale-Marie Wilson, Ph.D.**

Amount: **\$25,000**

Duration: Fall 2007 – Summer 2008

Other Grants

Funded

Title: On the Development of a Virtual Patient with Mild Traumatic Brain Injury (TBI)

Sponsor: Department of Veteran Affairs

Amount: **\$29,928**

Purpose: To escort 6 black female students to the annual blackComputeHER conference -2020

Sponsor: CCI Dean's Office

Amount: **\$4,330**

Purpose: To escort 6 black female students to the annual blackComputeHER conference -2019

Sponsor: CCI Dean's Office

Amount: **\$3,760**

Purpose: To escort 2 black female students to the annual blackComputeHER conference -2018

Sponsor: CCI Dean's Office

Amount: \$2,200

Teaching

Major Accomplishments

- Recipient of Excellence in Teaching Award in the College of Computing and Informatics at UNC Charlotte in 2014
- Redesigned Server-Side Processing course to represent a 'flipped-classroom' pedagogy
- Redesigned Web-Based Application Design to represent a 'flipped-classroom' pedagogy
- Redesigned curriculum for Web-Based Application Design course for fully online delivery
- Spearheaded the new Communication Across the Curriculum (CXC) curriculum updates and was instrumental in the development of the new related courses.
- Developed curriculum for new course Web-Based Application Development and Design
- Redesigned Computing Professionals II course with the goal of improving the success of our transfer student population
- Redesigned Computing Professionals course to meet university standards for QEP assessment
- Developed content for RealizeIt platform for Introduction to Computer Science II
- Redesigned Introduction to Computer Science II course to develop students' problem-solving skills
- Developed course for pilot mini-Fall semester. To serve as bridge course for incoming freshmen with no prior computing experience

Service and Outreach

Internal Service

University Committees

Prospect For Success (PFS) Steering Committee Member 08/14 – 05/18

- Contributed to changes in grading rubrics for university-wide assessment of Student Learning Objectives Represented college at steering committee meetings
- Represented College at PFS Charette

Dean of the Library Position Search Committee Member 08/14 – 02/15

- Participated in search for Dean of Library position Participated in airport interviews
- Served as host for one candidate during site-visit

Faculty Advising Library Committee (Alternate) 08/14 – 05/16

Competency-Based Education Summit (Raleigh, May 2016)

- Served as college representative (unpaid service over summer)

Undergraduate Course and Curriculum Committee Member 08/19 – 05/20

- Voted on all new university program proposals

Academic Advising Summit II (May 2016)

- Served as college representative (unpaid service over summer)

Academic Advising Summit (April 17 – 18, 2018) – Attendee

Academic/Student Affairs Summit 2/28 – Attendee

STEM Summit 4/16 – Attendee

College Committees

Transfer Credit Evaluation Committee 08/21 – present

- Evaluate transfer student transcripts and determine relevant CCI course (if any)
- Evaluate study abroad student transcripts and determine relevant CCI course (if any)

Unified Degree Committee 09/14 – 05/15

- Contributed to development of CCI unified degree Developed master spread-sheet of courses from all three departments and suggested core curriculum

Prospect for Success Implementation Team Chair 08/14 – present

- Chaired meetings Ensured Student Learning Objectives (SLO) met in PFS course, Responsible for assessment of SLOs, procured funds for graduate student assessors

Undergraduate Education Committee Member 08/14 – 05/15

- Proposed governance structure for CCI unified degree Assisted in generation of Dean's report on undergraduate quality improvement Assisted in development of committee's contribution to CCI Strategic Plan 2015: Developed core curriculum for unified degree. Evaluated and approved several new course proposals. Evaluated and approved new MS degree

Co-Op Advisor

- Served as Co-Op advisor students in Duke Energy's co-op program

UNCC Explore

- Attended UNCC Explore to increase presence of under-represented groups in the College

Writing Curriculum Committee Member 01/16 – 05/19

- Restructured how communication (oral and written) skills are presented across the curriculum

Application Development Advisory Board Member 01/16 – present

- This board is a partnership between Central Piedmont Community College and the various communities it serves, including UNCC. Advised in development of course content for degrees and certificates. Suggested competent resource individuals. Evaluated programs. Counselling in faculty recruitment and selection.

Faculty Executive Committee Member 08/2019 – 05/2020

- Contributed towards undergraduate curriculum updates

Department Committees

Library Representative 08/14 – 05/15

- Informed faculty on new services/resources offered by library Procured approx \$1400 in new titles for department

Search Committee Member 08/16 – 05/15

- Participated in search for 2 new positions: Director of Cyber Security programs and Faculty Position in Intelligent and Interactive Systems for Big Data

Undergraduate Education Committee Member 01/15 – 05/15; 08/18 - present

- Marketing of new curriculum design

Undergraduate Education Committee Chair 08/15 – 05/16

- Contributed to the development of the core curriculum for unified degree. Developed new syllabus for unified degree's core courses ITSC 2214 and ITSC 2175. Developed concentrations for the dept for unified degree.

Student Convocation Committee Member 05/15 – 08/15

- Worked on 1st student convocation. Attended meetings over the summer. Chaired the

- Assembly and Procession subcommittee (unpaid service)
- Advising Committee Chair 08/18 – present
 - Matched students with best suited advisor; provided support for new advisors; approved and submitted course substitution and waiver forms
- Academic Advisor 08/15 – 05/19
 - Advised approx. 200 students thru individual meetings; provided academic support, advice and resources; provided job search guidance and support; facilitated informal meeting with minority students and the Strategic Sourcing Manager - Christopher Meullion from Microsoft
- Academic Advisor 08/19 – present
 - Advised approx. 100 students thru individual meetings; provided academic support, advice and resources; provided job search guidance and support

Other Service

- Procured funding from Dean’s Office for Distinguished Speaker, Dr. Jamika Burge. Her presentation "Applied HCI: Career and Beyond" was the only one in honor of Black History Month (2020)
- Procured funding from Dean’s Office, organized and hosted CCI’s 2020 “**Forum on Anti-Racism & Intersectionality: Diversity Dialogue – Where do you stand?**” Procured participation from the Interim Special Assistant to the Chancellor for Diversity and Inclusion and several university experts on the topic of anti-racism and intersectionality. The forum was guided by Dr. Jamika Burge.

External Service

Invited Talks

Program Committees

- Co-Organized 1st Black Women in Computing Conference 01/10 – 05/15
- Co-Chair SIGCSE Kid’s Camp 2017 – 2019
- Co-Chair SIGCSE Birds of a Feather Sessions 2019 – 2021
- BDPA IT Showcase Faculty Advisor 2007 - 2008

Grant Review Panels

- NSF BPC Panel Reviewer Fall 2020
- NSF Panel Reviewer 03/10 & 08/07

Journal/Conference Reviewer

- Frontiers in Education – STEM Education Reviewer Fall 2020
- ACM Transactions on Computing Education Reviewer Fall 2020
- IEEE Computer Broadening Participation in Computing Reviewer 2006 – 2009

Editorial Boards/Panels

- NSF-funded Academic Advisory Board ROOTS of STEM Research Project Fall 2012 - present
- Advisory Board of the Center for African American Research and Policy, 2005 – present
- High School and College IT Showcase Judge at the 26th Annual National BDPA Conference, 2004
- Workshop Review Board for the 25th Annual National BDPA Conference, 2003.

Professional Service Affiliations

- Association for Computing Machinery (ACM) Member
- Sisters of the Academy (SOTA) Member
- IEEE Virtual Instructor Pilot Research Group (VIPRG)
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Community Service

- Book Fair Chair, Socrates Academy 2021 – present
- Empowering Leadership Alliance (EL-Alliance) Mentor, 2009 - present
- Tallapoosa Assistance Program, Director, 2004 – 2006
- Cary Woods Elementary School PTA, Treasurer, 2004 – 2006
- Tallapoosa Assistance Program, Tutor, 2003 – 2006
- Boy Scouts of America Den Leader, Pack 0013, 2004 – 2006

Leadership

- Selected to participate in **Leadership UNC Charlotte**, a forum that brings together new and experienced academic leaders at our university in a collaborative environment to enhance their skills, knowledge and relationships. This invitation was because of the leadership I have demonstrated thus far at our university and within our college, and also because of our expectations for the contributions that I will make going forward. (July 9th, 2021).
- Mentioned in Charlotte Observer, May 4th 2021. Quote ““Every single Black woman here says if it wasn’t for Dr. Wilson, they would have dropped out of the major,” Hamilton said.”
- Responsible for CCI’s Prospect For Success curriculum and presence. From 2014 – 2016, was sole contributor to the university QEP on both the university and college level. Developed and presented at PFS Charettes 2016 & 2017.
- Instituted purposeful assignments of faculty advisor to student based on commonalities. Exposed deficiencies in career preparation of specific groups.

Research Statement

My current research focusses on broadening participation in computing with a focus on Black students and addressing the structural challenges that are unique to them and may be best understood by others who have faced those challenges created by their intersectional identities. These inequities faced by primarily Black students in computing are structural and psychological. These **barriers** may include **Threats to Belonging**, “**hidden curriculum**”, **capital inequities (social and economic)** and **Cultural/social relevance of research**. As a researcher/academic who is also Black in computing, I believe that I am uniquely positioned to cultivate an inclusive environment for Black students, since our lived experiences reflect the same barriers. Mitigating issues of hidden curriculum will aid in the reduction of threats to belonging faced by Black students, potentially increasing their likelihood of persisting in the field of computing and going on to pursue culturally and socially relevant research to them and their communities and will provide transferrable interventions applicable to other underrepresented groups in computing.

With respect to education, I am working on providing equitable access to computing. Initial work involves the development and implementation of a course that will serve as bridge to CS 1 for incoming freshmen with no programming experience. A course is currently be offered during the mini-Fall semester Pilot program at UNCC.

Additionally, my research also includes virtual humans, advanced learning technologies and speech user interfaces. Virtual humans have been developed for use in many capacities. Some include using virtual humans as guides, tutors, patients, receptionists, game controllers and educators. My vision entails utilizing virtual humans in practically any scenario where human – human interaction is the prime option but is not possible. To that goal, I investigate human–virtual human interactions and the development of realistic, believable, embodied, virtual human agents in emotional, educational, commercial and/or social situations.

My research projects all include to some level advanced learning technologies. I am interested in tailoring learning environments to meet the user’s personalized needs while still being accessible and available to the larger group. Especially in very large classrooms, I am excited about providing personalized instruction to the students, while motivating them and providing an enjoyable interaction. Additional benefits to my research interests revolve around their culturally and socially relevant natures, which has been shown to attract minority students which contributes to the recruitment and retention of underrepresented groups.

Teaching Statement

My teaching philosophy revolves around motivation and engagement. I believe the more motivated/engaged a student, the more active role they will take in their education. This participation is parlayed into hard-working, independent and self-motivated students and has been shown to achieve higher learning and motivational outcomes. As an educator, my main goal is to increase my students’ understanding of discussed topics and foster critical thinking and problem solving. The practices I employ are derived from my work and service experiences. I view learning as a continuous, participatory process in which the students and instructor are engaged in a sharing of knowledge and experiences within the context of educational excellence. I believe that the motivation to learn can be fueled by students’ interest in the presentation of course material and relevant, both socially and cultural, examples of this material.

My instruction style includes open-discussions encouraging student-directed problem solving, tactics to promote interest in course material like mini quizzes, group projects that ensure collaboration and simulate real-world issues and the use of multimedia deliverable mediums to assist in delivering instruction. Selected activities, while developmentally appropriate for my students, will call for a high level of cognitive processing. I encourage the integration of prior or existing knowledge with new information to construct a meaning for new concepts.

I believe in holding students to a high standard. While it is imperative to exhibit compassion and empathy, it is also imperative to assist students in developing the skills that set them up for excellence rather than just meeting the minimum standard. Ensuring that students are provided with the accurate resources required for excellence and demonstrating how to utilize these resources are foundational to my teaching philosophy.