



Brandeis Hill Marshall is an associate professor of computer science in the Department of Computer and Information Sciences at Spelman College. She earned her PhD in computer science (RPI 2007) and completed a postdoc at Purdue University's Cyberinfrastructure Center (2007–2008). She was an assistant professor in the Department of Computer Information Technology at Purdue (2008–2014), earning promotion and tenure in April 2014.

Her objectives are two-fold: scholarly pursuits in data management and positively impacting diversity and outreach initiatives. Her research centers on the study and improved characterization of complex data networks—a subset of the emerging network science field. The advances in network science are used in business intelligence and data analytics, which lead to providing business leaders with knowledge to make more informed decisions. Intellectually, she is interested in discovering effective ways of handling text-based data and knowledge. The three main focuses are (1) labeled data analysis, (2) unlabeled data analysis, and (3) fixed-length data analysis, resulting in 25+ scholarly refereed publications including journal articles, conferences, and extended abstracts.

Since 2009, she has been actively engaged in mentoring the next generation of STEM professionals, particularly those from underrepresented groups. This engagement has included, but not limited to, serving on the program committees for the ACM Richard Tapia Diversity in Computing Conference, serving as a committee member of Super Computing's Broader Engagement, and leading the Purdue College of Technology cohort to the 2012 Grace Hopper Celebration of Women in Computing. Starting in 2012, Caio Soares (Bosch) and Marshall began co-leading the Broadening Participation in Data Mining Program, co-located with KDD.

Ed.: I found and enjoyed your blog—csdoctorsister.blogspot.com. What is the motivation for the blog and who is your audience?

BHM: A main reason for my blog is to break down some STEM stereotypes, even if it's one reader at a time :-). I hope that these posts are helpful not only to URM STEM faculty but also to any URM in the academy, especially those in the "ivory tower." Broadly, the URM in the academy are not exclusive to the faculty ranks but also graduate and undergraduate students.

Ed.: How has your life changed since you received tenure at Purdue? Explain the significance of this accomplishment.

BHM: Since obtaining promotion and tenure, I am more outspoken. I have a sense of clarity about my role as an instructor, scholar, and steward of computing. The significance of this accomplishment I wrote about in a blog post: <http://csdoctorsister.blogspot.com/2014/04/tenured-bwic.html>. In short, I made history again (#ThisIsEpic #TenuredBWIC). I was the first

Black woman to earn a PhD @ RPI (I asked when I graduated, but no one could name another), and I am the first Black woman to earn promotion and tenure in Purdue's CoT.

Ed.: Did you have role models for this journey? Are you hoping to be a role model as well? What do you think are the most important functions of a role model?

BHM: Yes, this journey is full of role models from keynote presenters, instructors, and research scholars to peers. I believe that I am a role model to those currently in the pipeline pursuing their BS, MS, and PhD in STEM degrees and seeking promotion and tenure in a STEM discipline. Role models should be present and thoughtful, as your words can help someone reassess his or her situation (and hopefully decide to persevere).

Ed.: You are leaving Purdue and beginning a new career at Spelman College, a historically black women's college. From a big school to a small school—big faculty, small faculty. Tell us

about your decision to move, the campus dynamics, and what you hope to accomplish at Spelman.

BHM: Spelman has charted a strategic path for each of our constituencies: students, faculty, staff/administrators, alumnae, trustees, and community partners. In particular, one of the student centric initiatives is providing access to opportunities for undergraduate research and career-related internships. A key element in my own journey has been the invaluable research and internship experiences. Couple this with Spelman's sustained effort in building strong STEM programs, and it is an exciting future ahead for Spelmanites. It's such a great forward-thinking plan. I look forward to contributing to its growth and success by delivering curricula and conducting research in information retrieval, data mining, data security, and social media.

Ed.: What challenges have you faced and at what part of your life were they the most significant? Since you were successful at overcoming them, could you explain your successes and how you found ways to deal with the challenges?

BHM: Trust in competency; being liked versus respected; guidance in navigating the unwritten rules: grants, students, research, teaching, and service. Truthfully, I'm a bit uncomfortable with calling this "my success." These accomplishments are obtained through exposure to several summer internships and with the assistance of a lot of people, hard work, and perseverance.

Ed.: What advice would you give to students interested in STEM disciplines that would help them be successful? How about women and women of color specifically?

BHM:

- Your path may not be lined in gold and full of fresh roses, but you would have some formal support networks.
- Being forearmed is being forewarned.
- Read *Unlocking the Clubhouse* by Jane Margolis and Allan Fischer.
- Attend at least one Tapia Conference.
- Attend at least one Grace Hopper Conference.
- Maintain a 3.0+ GPA.
- Have at least one co-op/internship experience.
- Build your professional network: have three to five letters of reference from former profs and employers

Ed.: What do you do outside of work for fun?

BHM: I enjoy listening to music, watching basketball, cooking/baking, and dancing.

Ed.: Do you have a favorite historical figure, and why is this person your favorite?

BHM: I don't have a favorite historical figure. However, if I was to host a dinner party inviting any celebrity, I would invite the following: Anita Borg, Warren Buffett, Jesus Christ, Whoopi Goldberg, Barack and Michelle Obama, Will and Jada Smith, Oprah Winfrey.

These men and women are a diverse group of impactful and purposeful agents of change. How each views (or viewed) and navigates (or navigated) through the world would be fascinating to hear.

