

Tamecia R. Jones, PhD

North Carolina State University

STEM - Science, Technology, Engineering, and Mathematics Education

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Professional Positions

2018- Present **Assistant Professor**, North Carolina State University

2017-2018 **Instructor**, North Carolina State University

2010-2017 **Graduate Research Assistant**, Purdue University

Education

2018 PhD, Engineering Education, Purdue University

2010 Master of Divinity, Theological Studies, Boston University

2004 MA, Learning, Design, and Technology, Stanford University

2002 BS, Biomedical Engineering, The Johns Hopkins University

Select Funding

2020 **Collaborative Research: Improving Undergraduate Education in Civil & Building Engineering through Student-centric Cyber-Physical Systems: Bringing Real-world Problems to Classrooms (co-PI)**

National Science Foundation (\$199,999)

Select Awards and Honors

2016 NC State Building Future Faculty Workshop, North Carolina State University

2014 Engineering Education Outstanding Service Award, Purdue University

2013 Black Scholars in Science Education II Fellowship, University of Georgia/National Science Foundation

2012 Jhumki Basu Equity Scholar, National Association for Research in Science Teaching (NARST) Equity and Ethics Committee

Select Related Publications

Jones, T. R., & Burrell, S. (2022). Present in class yet absent in science: The individual and societal impact of inequitable science instruction and challenge to improve science instruction. *Science Education*. <https://doi.org/10.1002/sce.21728>

Tolbert Smith, D., Jones, T., & Cardella, M. E. (2022). A Narrative Investigation of Black Familial Capital that Supports Engineering Engagement of Middle-School-Aged Youth. *Journal of Pre-College Engineering Education Research (J-PEER)*, 12(1). <https://doi.org/10.7771/2157-9288.1308>

Gray, D. Harris-Thomas, B.; Ali, J.; Cummings, T.; McElveen, T.; Jones, T. (2022) Urban Middle Schoolers' Opportunities to Belong Predict Fluctuations in their Engagement Across the School Day. *Urban Education* 0(0). <https://doi.org/10.1177/00420859221117682>

Denson, C. D., & Jones, T. R. (2020) Mentoring for STEM Advocacy. In A. Tyler, S. Hancock, & S. C. Richardson (Eds.), *Seeing the Hidden Minority: Increasing the Talent Pool through Identifying, Socialization, and Mentoring Constructs*. Charlotte, NC: Information Age Publishing.

Wolsky, M., Linde, N., & Jones, T. R. (2014). Engineering Kids' Lives: The Art of Delivering Messages. In S. Purzer, J. Strobel, & M. E. Cardella (Eds.), *Engineering in Pre-College Settings: Synthesizing Research, Policy, and Practices*. West Lafayette, IN, United States: Purdue University Press.

Select Related Presentations

Jones, T. R., (2020) American Society of Engineering Education Virtual Annual Conference and Exposition/At Home with Engineering Education, "Development of a Mobile Application That Supports Less Obtrusive Peer Assessment in K-12 Engineering Education Using an Engineering Epistemic Frame (Work in Progress)," American Society of Engineering Education, Virtual, USA.

- Denson, C. D. (Author Only), Jones, T. R. (Author Only), (2020) American Society of Engineering Education Virtual Annual Conference and Exposition/At Home with Engineering Education, "Systematic Approach to Diversifying Botswana's STEM Population," American Society for Engineering Education, Virtual.
- Jones, T. R., (2019) The Joint Conference of the 106th Mississippi Valley Technology Teacher Education Conference and the 57th Southeastern Technology Education Conference, "Expansion of a K12 Engineering Epistemic Frame for Peer Assessment via Mobile Applications," MVTTEC/STEC, Clarion Hotel, Nashville, Tennessee, United States.
- Jones, T. R., ASEE, (2019) "Creation of an Engineering Epistemic Frame for K-12 Students (Fundamental)," *American Society for Engineering Education Annual Conference & Exposition*, Tampa, FL.
- Jones, T. R., Trusedell, J. M., Oakes, W. C., & Cardella, M. E. (2016). Measuring the Impact of Service-Learning Projects in Engineering: High School Students' Perspectives. In *2016 American Society of Engineering Education Annual Conference & Exposition*.
- Paulsen, C., Wolsky, M., Cardella, M. E., & Jones, T. R. (2015). Informal Pathways to Engineering: Interim Findings from a Longitudinal Study. In *Proceedings of the 2015 American Society for Engineering Education Annual Conference & Exposition*. Seattle, WA.
- Jones, T. R., Cardella, M., Paulsen, C., & Wolsky, M. (2015). Informal Pathways to Engineering: Middle-School-Aged Homeschool Students' Experiences with Engineering (Fundamental). In *2015 ASEE Annual Conference and Exposition* (1–23). Retrieved from <http://peer.asee.org/24298>
- Jones, T. R., Cardella, M., & Purzer, S. (2014, July). *Using Social Media Behaviors to Design Language for Advancing Pedagogy and Assessment*. 19, 358–402. <https://doi.org/10.1080/10508406.2010.481013>
- Dorie, B. L., Pollock, M. C., Jones, T. R., & Cardella, M. E. (2014). Parents as Critical Influence: Insights from five different studies (Other). In *2014 ASEE Annual Conference and Exposition* (1–13). Retrieved from <https://peer.asee.org/parents-as-critical-influence-insights-from-five-different-studies>
- Atwater, M., Butler, M., Gray, S., Freeman, T., Cochran, G., Shady, A., ... Bayne, G. U. (2014, March). *Impact: Mini-Symposium Powerful Synergy Black Scholars in Science Education for the 21st Century in the United States, Part II*. 1–10
- Jones, T. R., Cardella, M., & Purzer, S. (2013). The Design of Language for Engineering Education: Recycling IM and Text Messaging to Capture Engineering Processes. In *2013 ASEE Annual Conference & Exposition* (1–11).
- Jones, T. R., Cardella, M. E., & Purzer, S. (2012, April). *The Reality Show of a High School Science, Engineering, and Design Course: Observing Documentation and Communication Patterns to Inform Pedagogy and Assessment*. 1–15.
- Jones, T. R., Cardella, M. E., & Purzer, S. (2012, March). *Using and Comparing Paper Media to Improve Student Reflection in Science and Design Courses*. 1–13. Indianapolis, IN. (pp. 1–5). (2011).

Intellectual Property

- 2020 *Remote Interview Application*, Patent Application Pending
- 2019 *Mobile Application for Peer Assessment/Video Research/Teacher Professional Development*, Patent Application Pending