

# Special Session: Inhibition to Antiracist Progress – Confronting the Intersection of Shame and Racism in Engineering Education

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**Abstract—** In this special session, we invite participants to identify how they might be interacting with cultures of anti-Blackness of engineering education environments through the potent experience of racial shame. The facilitators, informed by the respective backgrounds in anti-racism and professional shame, guide the participants through an interactive series of activities that inspire reflective thinking and, more importantly, a commitment to act to bolster justice and equity in engineering education cultures.

**Keywords—** *anti-racism, shame, equity, justice*

## I. OVERALL DESCRIPTION

Anti-Black environments have been facilitated through white supremacist cultures that permeate STEM in Western contexts, and specifically, engineering [1, 2]. Towards taking antiracist action, it first requires a willingness to become critically conscious and then the actual work of dismantling the thriving systems of oppression. Action [2]. We posit that what might block white individual's progress is their own discomfort, which is often associated with a resistance to reflect on failed and/or unmet expectations [3]. This special session will introduce tools to investigate individual experiences of shame, and how racial shame, specifically, is experienced, acknowledged and translated into behavior and action. Understanding our ability to confront racism without shame is key to determining if the commitment.

In this special session, we support participant exploration of the intersection of anti-Blackness [1, 2] and shame [3-6]. Although the special session will be designed primarily to engage scholars in this thought space of how acknowledging the harm done, a “reckoning”—within individuals, through institutions, across and within programs—is due Black people. To move towards the healing through reckoning in engineering and beyond, we must first each address our own limitations through deep reflection. One barrier to achieving

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such deep reflection occurs in navigating feelings of shame. During this session, we will engage in an interactive discussion to consider how we operationalize shame, the expectations we set, meet and fail, and how those are experienced differently with respect to race.

## II. GOALS OF THE SPECIAL SESSION

The goal of this special session is to provide participants with tools required to increase their critical consciousness of their racial positioning within context of engineering education. The community of scholars within the Frontiers in Education conference have demonstrated an impassioned interest in advancing systems of diversity, equity, inclusion, and justice within their programs, and this special session helps participants to identify and cope with common emotional patterns that undergird cross-racial interactions. Our goal is to equip participants with the tools required to take action on transforming their localized systems of engineering education. We anticipate an audience of primarily engineering faculty, engineering education researchers, and Ph.D. students of engineering education research.

## III. JUSTIFICATION OF NOVELTY

To achieve the goals of this special session, which involve substantial personal reflection, we need to instill these tools in a venue that will allow time for the participants to process—both interpersonally and intrapersonally—the emotional experiences that accompany efforts to confront systemic racism within engineering departments. Furthermore, a special session will promote healthy dialogue among the facilitators and the workshops participants as they co-construct mechanisms to recognize patterns of shame and then harness these moments to positively transform environments of engineering in ways that promote racial equity.

## IV. ITINERARY OF SPECIAL SESSION

The session will be organized with iterations of personal reflection, group reflection (in tables of 3-4 individuals), and brief moments of instruction from the facilitator. The first portion (0 – 20 minutes) of the session will involve a scenario

that places participants in the shoes of considering cross-racial interactions within engineering education. In the next portion (20 – 30 minutes), participants will individually reflect on their emotional response when reading the scenario and record their thinking. In the third portion of the special session (30 – 50 minutes), the facilitators will present research to demonstrate the role that shame often plays in inhibiting progress toward antiracist practices before guiding iterations of small-group and then large-group dialogue. Finally, the session will conclude in the last portion (50 – 75 minutes) with participants constructing tangible ways to act within cross-racial relationships that advance equity within engineering programs by centering Black wellness and liberation.

#### V. EXPECTED OUTCOMES

By the end of this workshop, participants will both challenge their own positionality in perpetuating anti-Black environments and become familiar with manifestations of shame. They will also identify one way that they can act, when prompted by shame, to shift their behavior towards the actualization of antiracist environments.

#### VI. ABOUT THE PRESENTERS

**Dr. Brooke C. Coley** is an Assistant Professor in Engineering at the Polytechnic School of the Ira A. Fulton Schools of Engineering at Arizona State University. She is also Principal Investigator of the Shifting Perceptions, Attitudes and Cultures in Engineering (SPACE) Lab, which aspires to elevate the experiences of marginalized populations, dismantle systemic injustices through systems of accountability and transform the way antiracism and inclusion are cultivated in engineering education. Her current research focuses on confronting anti-Black environments and making whiteness visible to promote mechanisms of institutional accountability. Through recent community based participatory research to understand Black students' experience of simultaneously navigating at the intersection of a global health, COVID-19, and racial pandemic, RACISM-20, the SPACE Lab has contributed a new taxonomy of racial

counterspaces utilized by Black students in weathering the “chilly” climate of engineering. Dr. Coley has given several invited talks, guest lectures, workshops, and anti-racist trainings.

**Dr. James Huff** [jlhuff@harding.edu](mailto:jlhuff@harding.edu) is Associate Professor of Engineering Education and Honors College Senior Faculty Fellow at Harding University. He conducts transdisciplinary research on identity that lies at the nexus of applied psychology and engineering education, examining how hidden phenomena drive individual behavior that shapes engineering and other professional cultures. Dr. Huff and colleagues developed *professional shame* as a phenomenon that often mitigates positive outcomes of well-being and equity within cultures of engineering programs. He has facilitated multiple workshops to support faculty in recognizing and coping with this phenomenon within the context of their programs.

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