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Role Model Videos featuring Minoritized Engineers (Resource Exchange)

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Alisha Sparks serves as the Executive Director of the Center for Educational Outreach within the Whiting School of Engineering at Johns Hopkins University. She works to ensure and further the excellence, quality, and impact of the Baltimore PK-12 STEM Educational Outreach programs. Alisha has a B.S. in Mathematics from Voorhees College and a M.A. in Instructional Systems Development from UMBC. She has her Maryland State Department of Education Advanced Professional Certificate in Mathematics for Grades 7 – 12 with an Administrator I Supervisor and Assistant Principal Endorsement. She previously worked at Baltimore City Public Schools in the Office of Enrollment, Choice, and Transfers and taught math at Digital Harbor High School. She also coordinated the summer program for Baltimore Freedom Schools and was the Director of the K-12 Programs at the Center for Women and Information Technology (CWIT) managing several NSF grants there.

Prof. Michael L Falk, The Johns Hopkins University

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Rachel E. Durham (PhD, Sociology & Demography, Pennsylvania State University) is an Associate Professor in the School of Education at Notre Dame of Maryland University, and a Senior Fellow with the Baltimore Education Research Consortium (BERC). With a background in sociology of education, education policy, and demography, her research focuses on graduates' transition to adulthood, career and college readiness, community schools, and research-practice partnerships.

Margo K Williams, The Johns Hopkins University

Margo Williams is an Instructional Design Manager at Johns Hopkins University's Whiting School of Engineering. She supports a portfolio of engineering and applied science courses and programs within the Whiting School, including BOAST over all five years of program testing, implementation, and refinement over multiple learning management systems (Blackboard, Blackboard Ultra, and Schoology). She holds a B.A. in English from St. Mary's College of Maryland, and a graduate certificate in Instructional Systems Development and an M.S. in Human Centered Computing from University of Maryland, Baltimore County.

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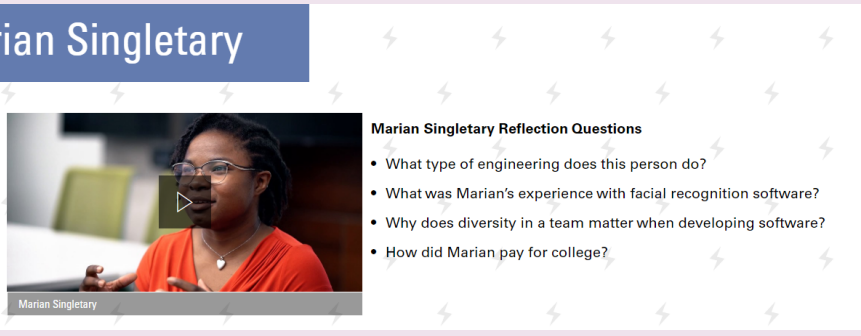
ENGINEERING ROLE MODEL VIDEOS

ABOUT THE PROGRAM

To address the problem of low algebra proficiency and limited engineering career awareness within Baltimore City Schools, Johns Hopkins University's Center for Educational Outreach developed the BOAST program – a strategy to extend learning time in afterschool or school day – and received funding from the NSF (DRL-2005790).

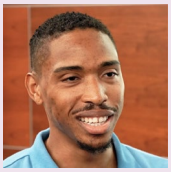
The Baltimore Online Algebra for Students in Technology (BOAST) program provides **high school students (Grades 9-12)** opportunities to develop mathematics mastery and confidence through an algebra-for-engineering, problem-based curriculum. The role model videos (one component of BOAST) develop students' engineering career awareness, offer insights into preparing for college, and provide reflection opportunities for how students' own background and interests fit into an engineering pathway.



ROLE MODEL VIDEOS

Ten role model videos feature predominantly minoritized students, professors, and other professionals describing their work in engineering careers, how their interests developed, challenges they encountered, and how they persisted. Each role model video also has a series of reflection questions (see example above). Videos can creatively be integrated into classes, clubs, advisory periods, and more.

OUR ROLE MODELS



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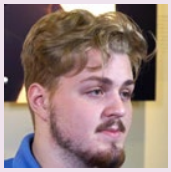

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ACCESS THE RESOURCE

Use the following QR Code to access the videos, reflection questions, and video transcripts:

GET IN TOUCH

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