MSCS MESS

Department of Mathematics, Statistics, and Computer Science
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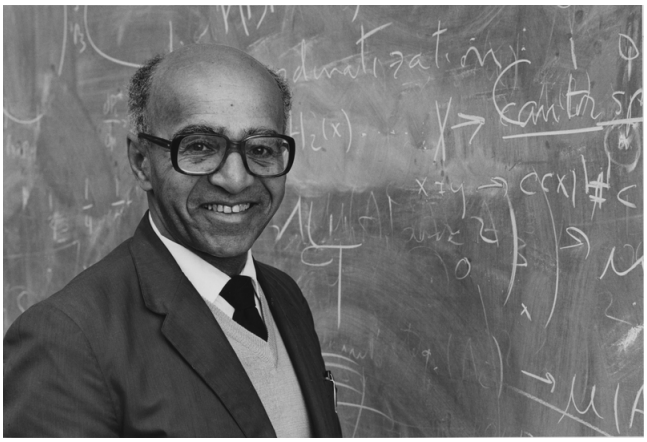
Black History Month Edition

This week's issue features some influential African-American mathematicians, statisticians, and computer scientists. Also read further on for details on a research seminar happening today!

David Blackwell

David Blackwell was a black statistician who worked in the 20th century. He was one of the first African-Americans to earn a PhD in mathematics, and was the first African-American elected to the National Academy of Sciences. Blackwell taught at Howard University, a historically black institution, before moving to the University of California at Berkeley. His work contributed to various fundamental concepts of modern statistics, including the Rao-Blackwell Theorem. (Source: University of Illinois Urbana-Champaign.)



Gladys West

Gladys West was born in rural Virginia. Though she spent her childhood farming, West was able to pursue an education in mathematics and a career as a mathematician for the U.S. Navy. She was the project manager of a federal satellite program whose work and calculations eventually gave way to the beginnings of GPS. After retiring from her career for the Navy, she continued her education and, at age 70, earned a PhD in public administration and policy affairs. (Source: Encyclopedia Britannica.)

Edray Goins

Edray Goins is a professor of mathematics at Pomona College in California. He earned his PhD in mathematics at Stanford University, and taught at Purdue University for many years before taking his position at Pomona. Goins conducts research in, among other things, number theory and elliptic curves. He spends most summers engages underrepresented students in mathematical research. (Source: Pomona College.)

Today's Research Seminar

Title:	Everything I Know About Little Lip
Speaker:	Prof. Bruce Hanson '75
Date:	**Friday, February 25**
Time:	3:30 PM
Location:	RNS 204

About the talk: This talk is a gentle introduction to the Little Lip function and is the first half of a two-part series. The taking-off point for the talk is the following important theorem:

Rademacher's Theorem: If $f : \mathbb{R} \to \mathbb{R}$ is Lipschitz on $\mathbb{R}$, then f is differentiable almost everywhere on $\mathbb{R}$.

(A function f is Lipschitz if $\exists\ M \in \mathbb{R}$ such that $|f(x) - f(y)| \leq M|x - y|$ for all $x, y \in \mathbb{R}$. If you don't know what it means for a function to be differentiable almost everywhere, no worries: that will be explained.)

It turns out that there are various generalizations of this theorem involing the so-called Big Lip and Little Lip functions. I will define and describe these two functions carefully and then examine the relationship between them, focusing on my favorite: Little Lip. There are still many interesting questions which are open concerning these functions. Don't miss out on the fun! Come and support an aging mathematician in his swan song.

Monday's Colloquium

Title:	This Year's Practicum Projects
Speaker:	MSCS Practicum Students
Date:	**Monday, February 28**
Time:	3:30 PM
Location:	RNS 310

About the talk: This past interim, MSCS students participated in the Practicum and worked on three different projects! Each team will present for 15 minutes on the work they did. The teams and projects are listed here:

"Checking Out Library Trends" by Abby Halverson '23, Andrew Noecker '23, and Catie Rhodes '23

"Spatial Relations of Wildfire Risk" by Bryce Gmyrek '22, Ben Grant '23, Yuzi Mi '23, and Chan Jin Park '23

"Medical Device Problem Classification Modeling" by Khang Huynh '23, Matthew Myers '22, and Claire Wu '22

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David McGowan, Editor
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