

he holds a B.S. in Applied Math from the University of Virginia and an M.S. in Computer Science from Johns Hopkins University. He also holds an MDiv and an M.A. in Conflict Transformation from EMU. We're grateful for Bob's contributions to the Mathematical Sciences Department!

Department News

Capitol Hill Briefing

Assistant Professor of Mathematics Daniel Showalter serves as the quantitative analyst for the Rural School and Community Trust, a nonprofit agency serving rural schools and communities. In April, Showalter and his colleagues were invited to the Capitol building in Washington DC to preview their upcoming policy report on the health of rural education across the nation. Showalter communicated the results of numerous statistical analyses, highlighted issues of inequity, and provided an overview of the status of STEM education in rural areas.

Tenure-Track Faculty Position

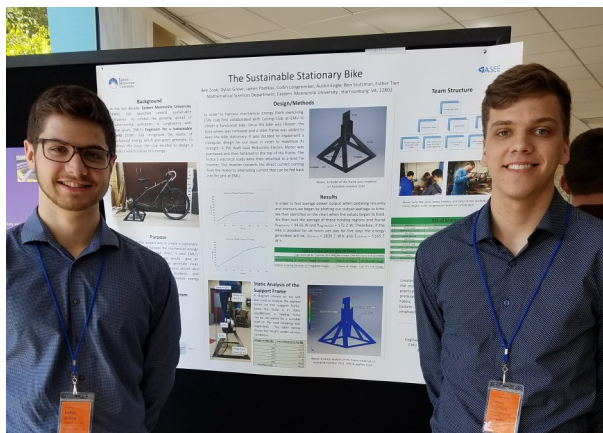
We're looking for new faculty! The Mathematical Sciences department is seeking to hire a tenure-track professor in Computer Engineering or Computer Science beginning in August 2018. Recent growth in the number of students enrolling as majors in our department, as well as development of our new engineering program make this an exciting time to be at EMU! The full job listing is posted at <http://www.emu.edu/hr/openings/>.

Enrollment in Mathematical Sciences

Fall 2016	Majors	Minors
Computer Sci.	30	3
Engineering	10	
Mathematics	22	7
Physics		4

Congratulations!

ASEE Conference Success



Engineering students **Dylan Grove** and **James Paetkau** represented EMU's Engineers for a Sustainable World Club at the American Society for Engineering Education Zone 2 conference, which was held in Puerto Rico in early March. Dylan and James presented a poster on "*The Sustainable Stationary Bike*," which won first place in the first/second year undergraduate design team division.

Math Contest

This year the department resurrected its math competition. Seven different students participated in the 25-question, 75-minute contest. The winner was senior Math/CS major **Aron Harder**, who also won the competition in 2014.

STEM Celebration Poster Show

Mathematical Sciences students submitted four posters to EMU's interdepartmental Spring STEM Celebration poster show on April 20. Several students in the Statistics for Natural Sciences course presented two posters, entitled "*Presidential Speech Predictors*" and "*Responses to 'Trolley Problem' Variations*." In addition, two posters received honorable mention recognition: "*Object Tracking in Video for Physics Labs*" presented by programming students **Kyle Johnson** and **David Nester**, and "*An Analysis of Planar Kinematics for a Crank-Slider*" presented by engineering students **Aron Harder**, **Austin Engle**, **Dylan Grove**, **James Paetkau**, **Ben Zook**, **Andrew Troyer**, and **Collin Longenecker**.

Graduates

Eight Mathematical Sciences graduates were recognized at EMU's 99th annual commencement ceremony on April 30th: **Aron Harder** (Math, CS), **Jacob Hertzler** (CS), **Kyle Johnson** (CS), **Jordan Leaman** (CS), **Timothy Martin** (Math, CS), **Joshua Miller** (CS), **Allan Oloo** (CS), and **Jonathan Patterson** (CS). Congratulations!

Problem Corner

We are still awaiting correct solutions for the probability question submitted in the previous Integram! For this issue's problem, consider a dog tethered to the middle of one side of a square doghouse that measures two feet per side. If the dog's chain is five feet long, what is the exact roaming area of the dog, not including the area covered by the doghouse?

Send your solution to Owen Byer at byer@emu.edu

Do you know a prospective student who is interested in studying math at EMU?

Contact Owen Byer at byer@emu.edu for information about applying for the Brenneman-Longacher Endowed Math Scholarship.

Recipients receive \$1,250 per year for four academic years, as long as they continue in the math major.



Integram

Mathematical Sciences Department
Eastern Mennonite University
Harrisonburg, VA 22802-2462

Return Service Requested

NON-PROFIT ORG.
U. S. POSTAGE
PAID
Harrisonburg, VA
Permit No. 20

Integram

Mathematical Sciences Department
Eastern Mennonite University
www.emu.edu/math Summer 2017

Robot Invasion!



Students in Intro to Computer Science this spring managed to control a flock of Finch robots, which infiltrated the classroom under the leadership of adjunct professor **Bob May**. Students used Python programming to automatically read sensors, make decisions, and maneuver the machines through a basic obstacle course. The robots were donated to EMU thanks to May's facilitation and a generous group of local technology advocates including **Lightcastle Technical Consulting, Immerge Technologies, Chiedo Labs** and **Shirley and Dick Shimp**.

May, who also taught Algebra & the Environment this spring, will return to teach several courses next year, including Computer Graphics and Software Engineering in the fall. A native of Bergton, VA,