MSU Engineering’s strong record of service highlighted as MSU celebrates Global Africa

With African music, dancing and colorful visuals, the Spartan Marching Band will celebrate Michigan State University’s decades-long scholarly engagement with Africa during its halftime show on Saturday, Nov. 18, when MSU plays Maryland in football. The show was originally scheduled for the Penn State game on Saturday, Nov. 4 - but a 3 1/2-hour game delay due to lightning caused the schedule change.

The halftime celebration is a preview for MSU’s Year of Global Africa, which will launch in January. During that year, multiple units and colleges across campus will host events and projects focusing on MSU’s rich history in key partnerships in Africa.

Engineering Dean Leo Kempel said he is proud of the numerous collaborations between faculty and students in the College of Engineering and their peers across Africa.

"From programs to teach young students to code, to student groups developing and delivering technology to rural villages, to joint research projects with partner universities, and placing engineering students in internships in sub-Saharan Africa, Spartan Engineers are representing us well in Africa. All of these efforts are in the best tradition of the pioneer land-grant university. When we look back in coming decades and ask the question “Who will Engineer the Future?” - we know the answer is “Spartans Will.”

The College of Engineering has numerous programs currently operating in Africa. Among them:

**Ethiopia:** Abraham Engeda, mechanical engineering, is partnering with institutions in Ethiopia and other countries to grow research efforts with partners on: [Improving rural power](#).

**Ghana:** Robert Ofoli, chemical engineering and materials science, is growing research opportunities with partner RoseEmma Mamaa Entsua-Mensah from The Council for Scientific & Industrial Research (CSIR). Laura Dillon, computer science and engineering, continues her work to develop Women STEM Engineering and Computing Camps during the summer of 2018, similar to [TechKobwa](#) in Rwanda.
Malawi: Peter Lillehoj, mechanical engineering, is working with a team from the medical colleges on malaria research, diagnosis, prognosis and monitoring using a mobile phone with his rapid in-field point of care malaria detection device utilizing funding from the NIH. Diagnosing malaria using mobile phones.

Mozambique: A team from the Department of Computer Science and Engineering served as part of a broader team with the MSU College of Agriculture and Natural Resources (CANR), working on famine early-warning computing technology analytics that were plugged into a larger regional FEWS-NET grant, funded by USAID.

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Rwanda: Laura Dillon, computer science and engineering, and PhD student Blair Fleet, along with IBM, The Peace Corps, and support from the Embassy, IEEE and others conduct successful summer technology camps for hundreds of young girls grades 9-12 and teachers in Rwanda. This TechKobwa Women in STEM Engineering Camp is planned to continue over the next few years.

South Africa: Robert Ofoli, chemical engineering and material science, will lead Engineering Education Abroad activities through engineering partners at the University KwaZulu Natal in Durban.

Tanzania: Erik Goodman and Lalita Udpa, both in electrical and computer engineering, are working with Jenny Olsen, from communication arts and sciences, and other colleagues across campus focused on bringing new technologies for adaption, adoption and experiential learning for both undergraduates and graduate students. Goodman’s work focuses on utilizing solar powered energy to bring technology to remote locations while introducing K-12 students to computing technologies. He continues to assist teachers and students in northern Tanzania using Spartan Engineering skills to enable Internet access through solar power. He is also working with farmers in both Tanzania and Kenya on creating innovative tools to improve agricultural technologies. See: Lessons in Tanzania. • Susan Masten, civil and environmental engineering, is starting a research engagement with partners at Mbye University of Science and Technology, with MSU partners. • A team from the Department of Computer Science and Engineering served as part of a broader team with the MSU College of Agriculture and Natural Resources (CANR), working on famine early-warning computing technology analytics that were plugged into a larger regional FEWS-NET grant, funded by USAID.

Tunisia: Karim Chatti and Nizar Lajnef, both from civil and environmental engineering, have partnered in Tunis on capacity building in engineering research through the Science, Society and State Program.

Uganda: A team from the Department of Computer Science and Engineering served as part of a broader team with the MSU College of Agriculture and Natural Resources (CANR), working on famine early-warning computing technology analytics that were plugged into a larger regional FEWS-NET grant, funded by USAID.
Zambia: Ron Averill, mechanical engineering, and graduate student Adam Lyman have been working on a Global Food Systems Innovation grant that involves bean threshing technology to improve agricultural yields, practices, and adoption of new technologies.

Leadership
Percy Pierre, electrical and computer engineering, leads the integration of engineering education for diversity and cultural programs. He directs several programs to recruit, retain, and graduate domestic graduate students in the College of Engineering with an emphasis on underrepresented groups.

The Academy for Global Engagement (AGE) empowers MSU faculty to become the next generation of groundbreaking global researchers. Since 2014, 39 fellows have been awarded $6+ million and are engaged in 34 countries worldwide. AGE is coordinated through the efforts of Senior Advisor Gretchen Neisler and Director Andrew Gerard, from the CANR Center for Global Connections, and Senior Advisor Mary Anne Walker, director of global engineering office. MSU has been invited to share the AGE model with academic networks supported by USAID in Malawi and elsewhere.

Walker said the college is proud to host more than one-third of all of the Mastercard Foundation Scholars on campus.

"We anticipate the growth of new research and new programs to evolve as these students graduate from Michigan State and return to Africa," Walker added.

Spartan Marching Band to celebrate Africa on Nov. 18
The Celebration of Africa will occur during the Maryland vs. MSU football game.

"Working with our African partners has been extremely rewarding and informative for our ensemble," said David Thornton, director of Spartan Marching Band. "Throughout the show the audience will experience a variety of musical styles and visual elements that are found in various regions of the African continent."

MSU’s Cultural Engagement Council – a group comprising leaders from MSU’s various arts and culture units and colleges – is sponsoring the performance in collaboration with the African Studies Center and other campus groups.

“This event is a great display of unity and collaboration from the MSU community, which is one of the key goals of MSU’s Alliance for African Partnership initiative,” Thornton said.

Partners in the project are Athletics, the Cultural Engagement Council, African Studies Center, Office of the President, College of Music, Mastercard Foundation Scholars Program at MSU, and MSU African student organizations.
For more, see: Spartan Marching Band celebrates Africa

Related Website: Portions of story courtesy of MSUToday.
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