2014 Passport Day at the Parkview Campus Attended by More Than 350 Incoming Students

Fall Welcome Passport Day is a chance for all incoming engineering and applied sciences students to get to know the faculty and department administrative staff in the College of Engineering and Applied Sciences (CEAS), tour the building to find out their classrooms and labs before the start of the semester, and participate in hands-on activities hosted by faculty, staff and students. Students received a "stamp" in their CEAS passport for each activity they participated, and students with the most stamps were given prizes at the STEP BBQ the following Sunday. The 2014 Fall Welcome Passport Day was one of the best attended since the creation of the event in 2009. Two of the winners of CEAS Fall Welcome Passport Day are transfer students! Passport Day relies on the dedication of all faculty and staff who donate their time to open labs, interact with students, and run demonstrations. The event is truly a college-wide effort.
Dr. Ala Al-Fuqaha Awarded $499,986 National Science Foundation Grant

Drs. Ala Al-Fuqaha (WMU, co-PI), Bilal Khan (CUNY, PI) and Kirk Dom- browski (UNL, co-PI) have been awarded a $499,986 National Science Foundation grant entitled “Applying Behavioral-Ecological Network Models to Enhance Distributed Spectrum Access in Cognitive Radio.” In drawing the connection from the problem of resource-sharing in Cognitive Radio (CR), to models of solutions found within human/animal societies, this project evaluates the extent to which our models of patterns of co-use in biological systems can be profitably leveraged within the context of distributed uncoordinated CR societies to enable individuals and groups to maximize their utility. Of particular relevance to this endeavor is recent ethnographic research on foraging networks of indigenous peoples and human foragers, which has found social relations to be a critical context in which natural selection acts on resource use and co-use behaviors. These findings concerning human behavior lie at the forefront of anthropology, revealing the tensions between sharing networks and optimal strategies and altering our understanding of past human social evolution, and by extension, our vision of the future evolution of artificial CR societies.

Dr. Ala Al-Fuqaha is an associate professor in the WMU Computer Science Department.

Dr. Steve Carr Awarded $400,000 National Science Foundation Grant

Drs. Steve Carr (WMU, co-PI), Laura Brown (MTU, PI) and Zhenlin Wang (MTU, co-PI) have been awarded a $400,000 National Science Foundation grant entitled “Adaptive Memory Resource Management in a Data Center - A Transfer Learning Approach.” Cloud computing has become a dominant scalable computing platform for both online services and conventional data-intensive computing. By sharing computing resources among a large set of subscribers, a cloud computing data center (DC) provides a cost effective means to give users access to computational power and data storage that is not practical in an individual setting. To guarantee Quality of Service (QoS), a DC often has to over-commit its resources to meet the goal. This proposal focuses on the effective management of memory resources within a cloud computing DC using transfer learning.

Dr. Carr is the chair of the WMU Computer Science Department.

Advanced Technology Summer Camp at WMU

Thanks to a collaboration with The Greta Berman Arbetter Kazoo School, Western Michigan University was able to offer middle school students from the Kalamazoo area a taste of engineering. The camp was held in WMU’s Parkview Engineering Campus laboratories, and taught by engineering professors. Students designed and created new objects using a 3D printer, competed in an animation contest, and met international students studying at WMU, all while exploring materials science, manufacturing, mechanical engineering, medical engineering and nanotechnology. Other highlights of the week were field trips to visit Landscape Forms, local innovators in manufacturing and engineering, and Core Kids, WMU’s Earth Science Outreach Program.

Dr. Pnina Ari-Gur, WMU mechanical and aerospace engineering professor, said, “Bringing together the creative young minds of middle school students from both the Kazoo School and the surrounding communities of West Michigan, with the knowledgeable faculty of WMU’s engineering college is bound to spark new ideas. This camp brings yesterday’s science fiction into today’s reality of science.” Ari-Gur proposed the camp to the Kazoo School, designed the curriculum, and ran the camp with a large team of WMU professors and graduate students who led the students through unique activities and experiences. Kazoo School’s Director of Programs Kathryn Bishop is excited about this collaboration as “there is a perfect correlation between the work and discovery that occurred at WMU as part of the summer program, and the hands-on, experiential learning that is foundational to the progressive education model that Kazoo School has practiced since its inception in 1972.” The Greta Berman Arbetter Kazoo School, an independent school for preschool through eighth grade, prides itself on “celebrating extraordinary minds.”