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CARCAM NEWS

Wallace State-Hanceville Graduate Participates in HI-TEC Conference 2016

Mavon Copeland proved his professional success at the HI-TEC Conference in Pittsburgh, July 25-28. Mavon graduated from one of the CARCAM programs that Wallace State-Hanceville offers in advanced manufacturing. He completed the Industrial Electronics Program and participated in the co-op program before being offered a full-time position with Nissan North America, Inc. in Smyrna, TN.

Due to his success as a student and employee he was asked to attend and participate in one of the HI-TEC sessions, *Learning from Working Technicians Who Tell Stories from ATE Programs*. He was part of a group of select industry technicians from across the nation to share their stories of the critical skills they learned while attending college. The interactive discussion allowed the audience to ask questions and make comments. The audience of industry representatives and educators valued the perspectives of the students in their role as a professional technician in the industrial work force.

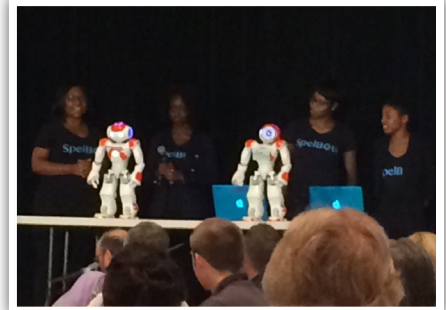


Who are the Spelbots?

Jerry Volcy and the Spelbots were among the top headliners as keynote speakers for the 2016 HI-TEC conference in Pittsburgh, July 25-28. The goal of SpelBots, Spelman College's robotics team, is to encourage students and young women of African-American descent to explore robotics and computer science.

During the presentation Jerry Volcy and the Spelbots told their stories about how educators can encourage students, especially young women to explore STEM related fields. CARCAM PI, Beverly Hilderbrand was highly impressed and inspired by the representation not only in robotics, but by the strong involvement of young women who are proving their proficiency in science, technology, engineering and math. Audrey Webb, Division Chair Engineering Technologies, Gadsden State Community College, attended the conference and said, "It was fascinating to see the young women from Spelman College be active members of the Spelbots, robotics team. They were very engaging and had plans about what they wanted to do after college. It was refreshing as an Engineer

myself to see other young women so excited about STEM." The team's goal is to continue their outreach to other candidates on a state and national level as well as break new ground in robotics research. The team is currently led by Jerry Volcy, Ph.D., Brown-Simmons Professor, Computer and Information Sciences and Director of the Spelman Innovation Lab, and is funded by the National Science Foundation, Boeing and General Motors. Spelman and the Spelbots are the first and only historically black college or university selected to showcase their technology in the Education Technology Showcase in Washington, DC, to U.S. Senators and the Director of the National Science Foundation.



Central Alabama STEM Camp

CACC found the sure-fire way to engage 26 students in STEM disciplines at their summer session of STEM camp. It was robotics!

Twelve teams competed in the robotics competition. The teams were made up of students from Radney Elementary, Stephens Elementary and Christian Academy in Alexander City, Dadeville High School, Horse Bend High School and one home-schooled student. Each of the two-person teams constructed a robot from Lego®s, a brick (or CPU, computer programming unit), gears and wheels. The students had to program the robot to travel straight the length of a 20-foot lane and stop inside a three-foot box. Robots that had a piece fall off or that crossed a lane boundary completely were disqualified. One follower of the slow and steady philosophy is J.P. Stark, a student at Faith Christian Academy, who won the competition.



Christopher Collins, left, from Radney, and Brandon Smith, from Benjamin Russell look over a Lego robot they built for the races at the CACC Stem Camp Tuesday, June 21, 2016. Photo Credit: Cliff Williams, the Outlook

Credit to David Granger, alexcityOutlook.com, archived, June 22, 2016

Jeff State 3D STEM Camp



Gadsden State STEM Camp

Area high school juniors and seniors are exploring jobs of the future during Gadsden State Community College's STEM Camp. The goal of STEM Camp is to encourage interest and prepare students for careers in the high-tech automated manufacturing industries. During the four-day camp, students attend classes and complete hands-on tasks in various technical programs and toured the Kamtec plant in Birmingham. Enrollment Specialist, Noelle Stovall says the hands-on education creates a connection for the students. Stovall says students are finding science, technology, engineering and math jobs more attractive due to the high likelihood of employment following graduation. Twelfth grader Trey Brady who is homeschooled and Anniston High School eleventh grader, Tara Banks says, "they decided to come to STEM Camp because they both have a great interest



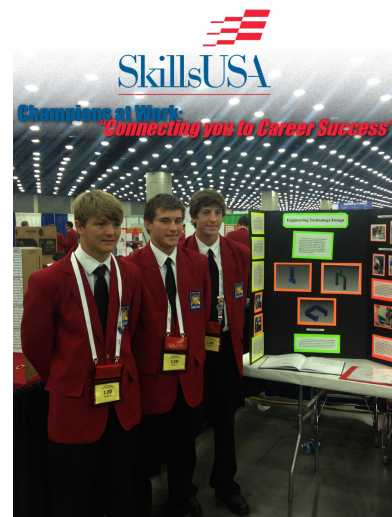
in the technical field." Students will complete a specific project designed by instructors and will leave the class with the item they have made. Some will build and test robots to demonstrate the principles they have learned during camp. The camp was sponsored by CARCAM as part of their Student Career Pathway Initiative.

Shelton State-Tuscaloosa STEM Robotics Engineering High School Camp

LEGO®s are not only stackable they can be engineered for mobility. CARCAM is proud to showcase the students of the STEM Robotics Engineering High School Camp hosted by Shelton State Community College-Tuscaloosa held from June 9-23, 2016. Students were able to design, program, engineer, as well as sync to a remote, a LEGO® elephant robot, which they did from scratch. The exercise gave the students an example of hands-on items utilized in BEST Robotics Competition while gaining experience in critical thinking, problem solving, and teamwork. The camper in the picture is controlling the LEGO® elephant robot with a new phone app, EV3 Programmer App, compatible with LEGO® software. The students concluded the exercise with a parade of elephants in an all-out Robot War.



Students Show Their Skills!



Congratulations to high school students Hunter Blanton, Payne Stancil and Lucas Collins for participating in the 2016 National SkillsUSA Conference in Louisville, Kentucky. The students competed at the Annual Alabama SkillsUSA Conference in order to advance to the National SkillsUSA Conference, Champions at Work: "Connecting you to Career Success", June 18-21, 2016.

CARCAM was proud to support students from the Etowah County Career Technical Center.

Please share your student/college successes, program information and faculty additions with CARCAM! Submit photos and information to bhilderbrand@gadsdenstate.edu or bhyatt@gadsdenstate.edu.

Dates to Remember:

September 16th

**CARCAM Industry, Education & Leadership
Bi-Annual Meeting • Birmingham, AL**

October 5-7

Southern Automotive Conference

*Yesterday's Dream, Today's Reality,
Tomorrow's Potential • Biloxi, MS*

October 12-14

**NCATC Fall Conference • New Partnerships
for Workforce Development • Chicago, IL**

October 17-18

**Alabama JLDC Conference • Tell Your Story •
Birmingham, AL**

October 26-28

**ATE PI Conference 2016 • Growing Leaders;
Leading Change • Washington, D.C.**

October • Manufacturing Month

WHAT IS MANUFACTURING DAY?



Manufacturing Day is a celebration of modern manufacturing meant to inspire the next generation of manufacturers. Although Manufacturing Day officially occurs on the first Friday in October—**this year is**

Oct 7, 2016—any day can be a Manufacturing Day. Companies and community organizations should plan their events on the date that works best for them and their community. Any day of the year can be Manufacturing Day. All events should be registered on this site no matter what date they are scheduled. Only registered event hosts have access to all of the free event planning and execution resources created by the national co-producers.

CUMMINGS DOTHAN PRODUCTION FACILITY

Dothan, AL • October 7, 2016 9:00am - 11:00am

NORTHEAST ALABAMA COMMUNITY COLLEGE

Rainsville, AL • October 29, 2016 1:00pm

**NW ALABAMA BEST ROBOTICS COMPETITION,
BY SHOALS CHAMBER OF COMMERCE &
NW-SHOALS COMM. COLLEGE**

Tuscumbia, AL • October 8, 2016 10:00am - 5:00pm

SIKORSKY, A LOCKHEED MARTIN COMPANY

Troy, AL • October 7, 2016 - Invitation-Only

Please share your Manufacturing Day Event with CARCAM! The Center will disseminate the publicity with all the member colleges and the public. Submit photos and information to bhilderbrand@gadsdenstate.edu or bhyatt@gadsdenstate.edu.

NEW at Jefferson State!

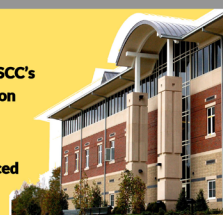
The industry partnership will provide 12 Jefferson State manufacturing students an opportunity for a paid 24-hour-a-week internship at **WKW Erbsloeh** in Pell City. Students will work as an advanced machine operator apprentice while taking classes toward an associate in applied science degree. Classes start in the fall 2016 semester and are within Jefferson State's manufacturing and technology degree option.

"As WKW grows and expands its business with automotive OEM's, we're excited to offer an opportunity for talented individuals to build a future together with us and Jefferson State in the form of an apprenticeship," said WKW Automotive President Todd Green. "This is a new endeavor and WKW is eager to embark on this journey with Jefferson State."

For more information and program requirements, go to www.jeffersonstate.edu/wkw or call (205) 856-8517.

New Apprenticeship Opportunity Earn While You Learn!

- Get Financial Assistance for Tuition and Books
- Get an Associates In Applied Science Degree in JSCC's Manufacturing Systems Technology Degree Option
- Earn \$11 per hour up to 24 hours weekly
- Work at WKW Erbsloeh in Pell City as an Advanced Machine Operator Apprentice



Jefferson State
Community College

WKW
automotive
WKW Erbsloeh North
America, LLC

Contact:
David Felton
(205) 856-8517
dfelton@jeffersonstate.edu

This education and apprenticeship program opportunity is provided as a result of a partnership between Jefferson State Community College and WKW Erbsloeh. Emphasis will be placed on coordinating the student's assigned apprentice work activities with the current semester course topics.

Tuition, books/fees contributions by WKW Erbsloeh are paid per program terms and conditions. Apprentice hourly pay will start at \$11.00/hour with increases as the student successfully progresses through the program. A limited number of positions are available.

**Complete the application
at jeffersonstate.edu/wkw**