This tuba player from Virginia now makes sweet STEM music with a Detroit robotics team

By Scott Tally, Detroit Free Press

As a tuba player throughout high school, college and for a year professionally with a marching band representing the pro football team in Washington, D.C., Parker Miles was accustomed to being a leader.

But for the past two school years, Miles has settled into a supporting role within a group of mostly Detroit teenagers. And the Woodbridge, Virginia, native says he wouldn't have it any other way.

"I'm an extra set of hands and eyes," says Miles, who serves as a mentor for high school students that are members of K9.0 Robotics, which is the FIRST(For Inspiration and Recognition of Science and Technology) Robotics Competition team at the School at Marygrove in Detroit. "The kids call me 'Coach P,' but I'm more like a cheerleader because the kids know so much more than I do."

While the 34-year-old Miles may not be a robotics expert, it was his desire to "study how Black kids use, understand and imagine technology," that led the University of Michigan Ph.D. candidate to the stately building that now serves as a high school within the Marygrove Conservancy at 8425 W. McNichols in northwest Detroit's Fitzgerald neighborhood.

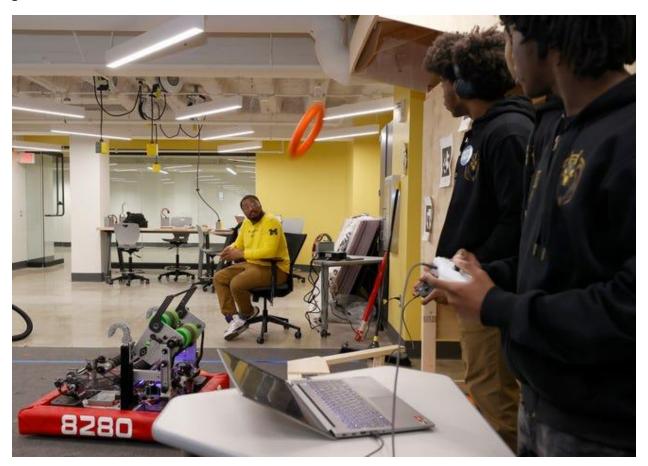


Like the college basketball teams that have been competing in March Madness across the country, Miles says his journey with the Marygrove robotics team this month also has been magical at times. That was the case March 15-16 at the Matthaei Physical Education Center, on the campus of Wayne State University, where Marygrove was among 40 teams from across metro Detroit that competed in a FIRST In Michigan district competition. However, before the 17-student squad — known as Team 8280 in the FIRST Robotics Competition universe — experienced its shining moment, there were some daunting hurdles that needed to be cleared.

"It was a long, hard day (March 15) of struggle and we had problems we had never seen," Miles said about the challenges the team faced during Day 1 of the matches at Wayne State, including what Miles described in layman's terms as "one of the arms breaking off" the team's robot and problems connected to coding that left the robot "stuck in place" for a period of time. "We had catastrophic failure after catastrophic failure, but the team was so resilient and worked through every problem. It was such a testament to their hard work and character."

Through it all, the resilient Marygrove team qualified for the playoff portion of the competition. And after two mentally and emotionally charged days of matches, the Marygrove team settled into the Matthaei stands to cheer on the teams that finished at the very top of the final team standings.

"It was the 30th hour of the competition; we had been there forever; and we were wearing the same clothes; but we hung out because we're good sports," Miles, who likened the buzz created in a gym or arena during the short matches that take place during a FIRSTRobotics competition to Olympic wrestling, said. "We were watching the teams (during the award presentations) that we wanted to be like."



And then, as Miles tells it, his team became *the* team that everyone in the Matthaei Center wanted to be like when it was announced that the team representing the School at Marygrove had been awarded the "FIRST Impact Award (formerly the Chairman's Award), which is awarded at FIRST Robotics Competitions to "honor the team that best represents a model for other teams to emulate."

Miles said the honor, which FIRST defines as the "most prestigious award" the organization gives out, triggered an epic response from the Marygrove team members. And on the evening of March 25, he delighted in replaying the moment.

"They were jumping, screaming, crying and looking for people to hug," Miles said of the response from Marygrove immediately after it was announced the team had won the Impact Award, which earned Marygrove a berth in the FIRSTIn Michigan State Championship at Saginaw State University from

April 4 to April 6. "The power of their explosive energy literally knocked me out of my seat."

In addition, Miles shared a powerful story about how he has observed and participated in efforts where the footprint of Marygrove's robotics team has extended beyond competitions and the students' school grounds.



"The kids care about each other and they care about the community," said Miles, who also explained that community involvement is one of the major factors the judges consider when deciding which team will receive the Impact Award. "The students are excited to represent Detroit excellence at the highest level and they have shared what they have learned about STEM in their community. They have taught coding to Girl Scouts and elementary school students, not because anyone has told them to do that, but because they wanted to be there.

"This group has done the right thing over and over and over, and they got rewarded. And it's something that I will never forget. It took a full week to tell the story again about them (receiving the Impact Award) without crying."

During the evening of March 27, the subject of crying and more also was discussed by Amara Small, a senior co-captain on the Marygrove robotics team.

"When our team heard that we won the Impact Award, there were a lot of tears from all of us; a lot of pride; and we were all hugging," Small, who chose to

attend Marygrove because of her passion for social justice and engineering, described. "And receiving the Impact Award was very personal for me because I compiled a lot of the background (essay, several summaries and videos) about our team that the judges reviewed."

Small later went on to speak about other topics and events that she feels strongly about, such as obtaining gender equity in STEM; a series of workshops that her team put on for local Girl Scouts, and her team's participation in a Black Tech Saturday event at Michigan Central Station, where the team showed off the capabilities of its robot. There also was a special welcome back party during the summer of 2023 after Miles returned to Detroit after completing an internship with eBay.

"We joked about Coach P being on a world tour because I believe he spent time in Australia," recalled Small, who has been involved in STEM activities since the second grade and aspires to work for NASA. "We really, really missed him and it was cool to see the team come together to plan that for him.

"And it showed that we are a family."

On March 25, Miles credited the team's family spirit to lead to coach Leon Pryor Jr., of whom Miles said: "I have never seen a person more committed to the success of others." Miles also pointed to veteran team members like junior co-captain Xavier McDonald, who joined the team as a freshman.

"I wanted to be a trailblazer," says McDonald, who aspires to be an engineer and looks forward to compiling a portfolio highlighting his experiences to share with colleges that interest him, including the University of Michigan and Kettering University. "When we receive awards and accolades, I think it pushes us even further. They become checkpoints and then you strive to go higher and higher. And I've decided that I should put all of my efforts into robotics."



Miles, no doubt, will give his very best effort on April 23 when he defends his dissertation. When sharing his findings about the Detroit youths he has been in a community with on the Marygrove robotics team, Miles will have several robotics competition experiences to call upon, including a FIRST In Michigan district competition at Renaissance High School that will conclude on March 30 and the state championship competition in April, which also will play a major role in determining the Michigan teams that will qualify for the 2024 FIRST Championship — a world championship event scheduled for April 17-20 in Houston. But regardless of how well the Marygrove team fares in upcoming tournaments, Miles, who is seeking a doctorate in education and digital studies, has hinted that competition standings will not be the first thing on his mind when he shares what he has learned from young people on the Marygrove robotics team.

"The joy is fundamental," declared Miles, who now proudly lives in Detroit on the city's North End. "The coolest thing is to see the kids so fully being themselves. And this group is committed to being joyful and committed to learning and growing."

Scott Talley is a native Detroiter, a proud product of Detroit Public Schools and a lifelong lover of Detroit culture in its diverse forms. In his second tour with the Free Press, which he grew up reading as a child, he is excited and humbled to cover the city's neighborhoods and the many interesting people who define its various communities. Contact him at stalley@freepress.com or follow him on Twitter @STalleyfreep. Read more of Scott's stories

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'Excited to represent Detroit excellence at the highest level'

What: K9.0 Robotics, the FIRST(For Inspiration and Recognition of Science and Technology) Robotics Competition team at the School at Marygrove in Detroit

Roster:

Angelo Barton - Software

Tahara Drew - Team Lead Electrical - Drive Team

Aslan Fleming – Mechanical

Olivia Flood - Team Lead Electrical

Joshua Gassaway - Software

Karion Gooden - Mechanical

Xavier McDonald - Captain and Team Lead Mechanical - Drive Team

Corey McKenzie - Business

Shyann Miller - Scouting

Staja' Miller – Team Lead Computer Aided Design – Drive Team

Emily Nahabedian - Electrical

 $Leon\ Pryor\ III-Team\ Lead\ Software-Drive\ Team$