

Coding for health equity

Senior Mercy Oladipo is building tools to address disparities in health care.

Laura Rosado | MIT News correspondent March 24, 2023



MIT senior Mercy Oladipo, a joint major in computer science and molecular biology, uses her coding skills to build tools addressing disparities in health care.

Photo: Jodi Hilton

Choosing a major was a long process for Mercy Oladipo. Coming into MIT, she was interested in both computer science and medicine, but a plan for how those passions would intersect took some time to coalesce.

Oladipo finally settled on a joint major in computer science and molecular biology, which allowed her to dive into computer science and also fulfill her pre-med class requirements.

At face value, the classes in her two majors "are very far-removed," says Oladipo. "You don't really touch any interaction until your junior or senior year, but it helped me feel like I could do whatever I want and chart my own path."

Now a senior, Oladipo has pursued a range of opportunities that allow her to apply her coding skills to build tools for health care, with support from MIT's PKG Center, MIT Experimental Study Group, and MIT Sandbox. These include exploring health disparities in end-of-life care with the Clinical Decision-Making Group in MIT's Computer Science and Artificial Intelligence Laboratory, revamping the webpage for the Boston Medical Center's Autism Friendly Initiative, and creating websites for studies run by Tufts University's Maternal Outcomes for Translational Health Equity Research (M.O.T.H.E.R.) Lab.

For Oladipo, the through-line among her interests has always been equity, whether in health care or in education.

An app for Black mothers

Everything came together when Oladipo participated as a sophomore in Womxn Ignite, a tech incubator for women interested in public interest technology. It was there that she first had the idea for Birth By Us, a startup she co-founded with Ijeoma Uche, a second-year master's student at the University of California at Berkeley.

<u>Birth By Us</u> is a pregnancy and postpartum app built by and for Black women. The goal is to be a centralized source of information throughout the entire birth experience, from prenatal appointments to postpartum recovery. Every day, users fill out a questionnaire to screen for symptoms that are often overlooked, and will be provided with resources tailored to their personal experience. With Birth By Us, Oladipo hopes to address the racial disparity in maternal deaths while also forging stronger connections between community programs and Black mothers.

Now a senior, Oladipo still sees many paths ahead of her following graduation. Over the next few years, she plans to keep working on and scaling Birth By Us. She'd also like to attend medical school and pursue maternal health research in other contexts.

"Everything is very intertwined," Oladipo says when asked about what comes next. "It's all the same topic in different fonts."

Oladipo also says she isn't stressed about the uncertainty in her future. She credits that comfort to the support she receives from her family and her faith. Oladipo is grateful for her family's presence in her life, whether that's in the form of advice from her parents and two older siblings or daily calls from her younger brother.

A lifelong love of language learning

This year, Oladipo spent Independent Activities Period in Aguascalientes, Mexico, teaching middle schoolers through the MIT International Science and Technology Initiatives' Global Teaching Labs program. Along with two other MIT students, they tackled coding and building lava lamps, and ended the program by building a Rube Goldberg machine in collaboration with Panamerican University.

To apply for the program, Oladipo needed to be able to speak Spanish, a requirement she easily cleared from studying the language since high school. There were two reasons why she had picked it up. The first was that most of her friends also spoke Spanish and she wanted to be able to converse with them in their native language.

"My best friend in seventh grade didn't have a phone, so we'd always email back and forth in the mornings," says Oladipo. "I would try to practice my Spanish with him. I look back and the grammar is not there, the spelling is all off, but it was cute."

The second reason was that she had studied Latin since second grade and found herself wondering what came next after completing AP Latin.

"Everyone used to tell me it's a dead language, but I thought it was so cool," says Oladipo. She adds that she was "such a nerd back then" for enjoying the nuances of the language, such as the rigid grammatical structure and how English derivatives came to be.

Oladipo didn't plan on taking Portuguese in college — she had originally intended on adding Yoruba to her arsenal but couldn't work it into her schedule — but decided to take it when it fit her schedule. Now, she's eyeing a potential Fulbright in São Paolo and has plans to see more of Latin America following graduation.

For now, Oladipo is focusing on finishing up her college career. In between managing her company and balancing her classwork, she's also a member of the cheerleading team. And, she's currently the president of the Xi Tau Chapter of the Delta Sigma Theta Sorority, Inc. where she helps plan public service events and other programs throughout the year.

There's a lot on her plate, and Oladipo acknowledges that. But she's also looking forward to what comes after graduation.

"I'm a bit of a workaholic, but I'm excited to be more done and focus on what I actually want to put my time toward," she says.