Business

Trying to Level the Playing Field in Tech

A new program at a historically Black university seeks to bypass Silicon Valley's frequently harsh vetting process.

By NATASHA SINGER

Trying to obtain an internship at a leading tech company or start-up can be a depressing quest for many college students, requiring a sustained, semester-long effort — often with little to show for it but a slew of rejections.

Now Bowie State University, a historically Black university in Bowie, Md., has created its own internship placement program. And it does not require undergraduates to jump through standard Silicon Valley hoops, such as spending countless hours studying for coding tests or taking high-pressure technical assessments while an interviewer looks on.

"To be honest with you, it's a brutal process," said Rose Shumba, the chair of Bowie State's computer science department, referring to the internship application process at many large tech firms. She described trying to buoy stressed-out students as they prepared for technical interviews that she thought did not assess their skills or professional potential. "We see things very differently here at Bowie."

To widen opportunities for students, the computer science department set up

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Rose Shumba, chair of Bowie State's computer science department, with Roxan Rockefeller, a junior who worked last summer as a software engineering intern for a tech company.

Dr. Shumba nudges computing students to apply for particular internships and even reads their résumés.

its own internship placement program last year in partnership with a number of companies and government agencies. The program aims to match students directly with employers seeking interns. It also holds training sessions for students on interview skills and workshops on hot topics like machine learning.

The Bowie approach offers students an alternative to the mass-scale application system at many large tech firms. That process typically involves tens of thousands of college students submitting their résumés cold to online company portals, where candidates are initially sorted and ranked by résumé-reading software.

At Bowie State, participating employers come frequently to campus to get to know, mentor, interview and directly recruit students for internships in a process that is more intimate than the one-off information sessions that tech companies often arrange with university career cen-

ters. And the Bowie process does not typically involve high-stress technical tests. That has spared many students, some of whom have parttime jobs, from spending dozens of unpaid hours on applying for Silicon Valley internships.

Founded in 1865, Bowie State is a computer science powerhouse among historically Black universities. The school is known nationally for its expertise in cyber-security education. Last fall, the number of Bowie undergraduates majoring in computing soared to 332, a 75 percent jump from 2019.

But over the last several years only a few Bowie students have made it past the vetting process at leading tech firms like Amazon, Microsoft and Oracle to obtain internships, Dr. Shumba said.

The competition can be stiff. Adobe, the maker of Photoshop, said it typically hires about 600 interns from the more than 100,000 candidates who apply for its

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Rose Shumba, right, chair of the computer science department at Bowie State University, helped set up a program that aided Roxan Rockefeller, left, a junior majoring in computer science.

Ms. Rockefeller landed an internship offer from Eli Lilly after networking at a tech conference.

summer internship program in the United States each year.

Last summer, with the new program in place, 60 Bowie computing students interned with companies like Deloitte, federal agencies and local start-ups. One of them was Dejai Brown, now a senior, who is interested in cybersecurity.

Before she started applying for internships, Ms. Brown worked part time at Chickfil-A. Last year, after Dr. Shumba encouraged her to apply for a government security clearance, Ms. Brown got an internship at the Marine Corps Forces Cyberspace Command. She also interned at Battelle, a technology research giant.

"Recruiters at Battelle reached out to me, took me through the interview process, and they ended up bringing me on," Ms. Brown, 21, said. "That was a lot less stressful than what it could have been with a coding interview."

The Bowie State program addresses socioeconomic barriers — like lack of technical work experience or industry connections — that can hinder some students.

To help younger students gain experience, Dr. Shumba set up computing research internships on campus. Last year, she took some students on an all-expenses paid trip to the Grace Hopper Celebration in Florida, a major annual conference for women in tech. Six students returned to campus with internship or job offers.

Among them was Roxan Rockefeller, now a junior, who worked as a software engineering intern last summer at Tata Consultancy Services, a tech company. Then last fall at the conference, she attended an information session by Eli Lilly, the drug giant. That led to an internship interview.

"I have a passion for data, and I just started talking about how I want to explore as many areas as possible with my computer science degree," Ms. Rockefeller, 21, said. "The next day I got a call from one of the recruiters telling me on the phone that I got the internship."

This year, Adobe started its own internship program with Bowie State, focused on cybersecurity. The internships are part of a larger company effort to help prepare more Black and Latino students for tech careers.

This summer, about a dozen Bowie State students will work as cybersecurity interns at Adobe. That will make the Bowie students eligible for full-time job offers from Adobe after they graduate, just like hundreds of other summer interns at the company.