Hajar Aziz's major in applied physics, complemented by a minor in archaeology, may seem like an unlikely pairing, but it perfectly reflects her unique perspective on the world.

Picture Credit:
Lucas Joel
Hajar Aziz fell in love with the stars when she was eight years old. Her third-grade teacher’s lesson on the sun, moon and stars lit a fire in Aziz that set her on a path of scientific exploration.

“After that day, I became obsessed with everything about space,” Aziz recalled. That obsession never wavered as she went on to major in applied physics at UC Irvine, where she researched galaxy formation and what the James Webb Space Telescope can reveal about faraway galaxies.

Before transferring to UCI in her junior year, Aziz graduated from Irvine Valley College with not one, but three associate degrees – physics, mathematics and a general transfer degree.

A native of Irvine, Aziz always planned to attend UCI after community college. The promise of research opportunities and getting to be close to her family made UCI an easy choice.

Her major in applied physics, complemented by a minor in archaeology, may seem like an unlikely pairing, but it perfectly reflects Aziz’s unique perspective on the world.

"I took an archaeology class in my junior year, and really enjoyed it," Aziz recalled. In the class, Aziz quickly realized the interconnectedness of the celestial phenomena she had been studying and the human history buried in the Earth beneath her.

"Looking at the evolution of the galaxy, you're looking back at history, and with archaeology, you're looking down to uncover human history," Aziz said.

Aziz is completing a senior thesis as part of the UCI Campuswide Honors Collegium. Her thesis will be the culmination of over a year’s work in Dr. Vivian U’s research group.

The thesis isn’t just a personal milestone: it’s Aziz’s contribution to the expansive field of extragalactic astronomy, offering insights into galaxy formation.

Under guidance from Dr. U, Aziz did a project that brought her face-to-face with the mysteries of a newly discovered galaxy. With the James Webb Space Telescope (JWST) as her window into the universe, she explored the potential of a galactic merger event, marrying image and spectral data to shed light on the mysteries of
the cosmos.

Dr. U, as well as Professor Aaron Barth, gave Aziz the guidance and support she needed to affirm her career aspirations as a researcher.

With plans to delve into postbaccalaureate opportunities and continue intertwining her passions for physics and archaeology, Aziz's trajectory is set toward a future where she can contribute meaningfully to both fields.

As Aziz looks to the future, her gratitude for the UCI community shines bright. "I would not have had the success I had if not for my community," she said, acknowledging the profound impact of the friendships and collaborations fostered at UCI.

Aziz’s story shines a light on the power of interdisciplinary inquiry, a stellar example of how the marriage of distinct fields can illuminate our understanding of both the universe and our place in it.

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