

PHOTON2 News spoke with Darren Galus of the Harris Corporation about his background, experiences in the fiber optics field and views on career paths in the industry.

What was your introduction to photonics, and how did you get to where you are today?

My first true introduction to the photonics industry was at Springfield Technical Community College (STCC). I decided to attend STCC after reading an article in a local paper about the laser program there. I feel that my contacts within the industry, education I received at STCC, hands-on experience gained at the NSF/ATE-funded National Center for Telecommunications Technologies (NCTT) and my strong work ethic have advanced my career to the level it is today.

What were some of the critical turning points that made you into the successful Engineering Specialist in electro-optics that you are today?

Working as an intern at NCTT for then Professor Nick Massa was a huge defining point in my career. His vast network of contacts helped me find my first two jobs after college, which were at Sandia National Laboratories and Qtera Corporation, a subsidiary of Nortel Networks.

What are you currently doing at Harris Corporation?

I work on various classified government programs as well as a Free Space Optics program at the Kennedy Space Center in Florida.

What academic background do you think high school students need to be successful in a photonic technology associated degree program and the workforce?

First, I think they need a strong base in algebra and an introduction to calculus. Second, they should have had a course in physics.

Where do you see the job opportunities for high school and community college students in this field?

I see little-to-no technician-level opportunities for students with only a high school degree. However, gaining a science/technology background that includes optics/photonics in high school is a very helpful

building block. It will give students a solid educational foundation and open the door to a career in demand. With good contacts and a strong work ethic, a student from a community college can achieve a very fulfilling and successful career.

What do you see as the current economic climate in the field of photonics?

The field is constantly growing with new applications arising every day. The forecast is for a rapidly growing market, especially in the defense sector.

What are your plans for continuing your education?

I am currently working towards my bachelor's degree in Optical Engineering at the University of Central Florida, where I have been teaching graduate students about work in Free Space Laser Communications.

Do you have any other thoughts?

With today's growing workforce, it is vital to have the hands-on experience acquired at a two-year college like STCC. This, coupled with a four-year degree from a university, will contribute to a long and successful career in the photonics industry.

Darren Galus' mentor Professor Nick Massa is a Co-Principle Investigator for Project PHOTON2 and PHOTON PBL. Massa is now associate dean for the School of Technology at Central Connecticut State University. ■



Darren Galus doing setup for a Free Space Communications link test at Shuttle Landing Facility at Kennedy Space Center.

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lab kit and working with her peers helped propel her success. "It wouldn't have been possible without PHOTON2 support. Knowing someone was backing me up...that in itself has been invaluable."

Goyette is excited about providing that support to other schools. She recognizes that her research background could be valuable for teachers who do not share it. Whether explaining ways to team up with guidance counselors or how cross curriculum can be developed for any subject, Goyette has found her niche in the PHOTON2 Alliance and H. H. Ellis Technical High School.

The next challenge for Goyette is how to bring industry into the classroom. Currently there is no advisory committee for that. Because academics receive a different kind of support than the technical shops, she and the Ellis administration will need to shift gears to partner with industry. It will be one among many of Goyette's steps in the right direction.

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