



Mr. Turhan Carroll

Turhan Carroll is a PhD student in the engineering education department at The Ohio State University. He received BS degrees in physics and applied mathematics from North Carolina State University, and an MS in physics from The Ohio State University.

Over the last 18 years, Turhan has worked in a diverse array of STEM settings. He interned for 4 years at NASA Langley Research Center. There, he worked in the Flow Physics and Controls branch where he performed flow field analyses around basic geometries in support of CFD code validation studies. He also worked in the Space Technology branch where he helped prototype a drone-like autonomous stretcher that utilizes control moment gyroscopes for maneuverability.

After completing his master's degree in physics, he worked for nearly a decade as a research physicist at the Air Force Research Lab performing research in magneto-photonics. Highlights include discovery of omnidirectional isolation in stratified media, creation of a chip-scale magneto-optics lab, and the invention of the nonreciprocal coupler isolator.

During the course of this time, he has also served as an educator in laboratory, classroom, and community settings through teaching, professional development and outreach efforts. He has helped recruit, and mentor countless underrepresented minorities into STEM fields, and has worked tirelessly to promote the development of well-trained and highly capable black scientists and engineers both formally and informally.

In early 2019, Turhan founded Generation STEM, an organization whose mission is to facilitate equity in STEM fields by bringing cutting-edge STEM learning experiences to classrooms.