

Educational programs like the SeaPerch Program, initially developed three decades ago by the Massachusetts Institute of Technology (MIT) and the Office of Naval Research, have proven effective in introducing students to robotics and engineering through an affordable curriculum [1]. These initiatives play a vital role in sparking students' interest in robotics and equipping them for advanced studies and careers in STEM fields [2]. As STEM disciplines continue to expand rapidly in the 21st century, it is crucial to evolve such programs to ensure students acquire the skills needed for future jobs and research [3]. The SeaPerch Program, created by the MIT Sea Grant Lab in the 1990s, offers a hands-on, project-based learning experience. Additionally, design challenge competitions encourage creative problem-solving as students enhance their basic SeaPerch models to meet specific challenges [4]. To integrate both emerging and established technologies, the MIT Sea Grant Lab is developing SeaPerch II, a new take on the original program. The SeaPerch II aims to bridge the gap between traditional and cutting-edge technologies, offering a more accessible and affordable way for young students to explore science and technology. Wireless underwater communication has been a popular topic for research, and this paper builds on the SeaPerch II program by providing a cost-effective method to introduce students to it. After discussing various methods of underwater communication, including acoustic, radio, and optical communication and going over the benefits and downsides of each method, this paper provides a method to communicate optically with the SeaPerch without the use of a tether using cheap, commercial off-the-shelf (COTS) products such as Arduinos and LEDs.