

1096-VR-2192 **Anthony F. Filiziani*** (wcdt@iup.edu), 711 South 6th St. Apt. # 5, Indiana, PA 15701. *Image Enhancement Algorithm for Under-Water Images.*

The art of imagery has been one of the most revolutionary turning points of the 17th century. Since its' discovery, the technology upon which it was founded has significantly improved over the last 300 years. While the tools used to create an image have significantly improved, there will always be issues concerning its quality from the original source. No matter where an image will be taken, there will undoubtedly be issues with an images' quality once extracted. These issues include, Color Attenuation, "Noise", Reflection and Refraction, and many others; and while most of these enhancement issues can be addressed with current technological approaches, they can become more complex for under-water imagery. This paper will focus on an algorithm to enhance under-water images due to the additional sources of "noise" that otherwise would not be present under normal circumstances. Initially, a brief description of underwater imagery will be discussed, and the issues pertaining will be explained as well. Once established, the format of the algorithm will be introduced, explaining each process and its purpose for the overall process of enhancement. Once the algorithm has been completely explained, the results will be reviewed with a brief description of comparison to the original image. (Received September 17, 2013)