The June BSAC Researcher Seminar Series will feature Dr. Youmin Wang of BSAC Co-Director Prof. Ming Wu’s group. In this presentation, Dr. Wang will focus on the development of a MEMS based optical phased array with an unprecedented aperture size and phased shifter array size. This MEMS based optical phased array has broadband operation capability, which covers from UV/VIS to NIR range at the same time (400nm ~ 1.8um) and is compatible with multi-wavelength operation. The primary commercial application for this MEMS optical phased array is for light detection and ranging (LiDAR) but other potential applications include holographic display, AR/VR, and diffractive optical communication switch.

Dr. Wang joined BSAC as a Postdoctoral Scholar in October 2014 after earning his Ph.D. from the University of Texas at Austin where he conducted research in microelectromechanical systems, various imaging modalities, and biomedical microdevices. His research on the Optical Phased Array for LiDAR has earned the Best Paper honor twice at the 2016 Fall Research Review and 2016 Spring Research Review.