



## Yuhao Qiang, PhD

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Dr. Yuhao Qiang is currently an assistant professor at University of Maryland Eastern Shore. Before that, Dr. Qiang did his postdoctoral research in the *Nanomechanics Lab* at MIT. Dr. Qiang earned his Ph.D. from Florida Atlantic University in 2019. Dr. Qiang is a researcher and educator specializing in the field of biomedical engineering. Dr. Qiang seeks to explore multi-disciplinary evidence-based engineering approaches, including bioMEMS, microfluidics, micro-physiology, biophysics, computational simulation and artificial intelligence for the study of cell biology that is difficult to achieve using conventional techniques. Dr. Qiang is committed to addressing critical questions with emphasis on blood-related or immune-related hematological diseases, contributing to advancements in the diagnosis and treatment of hematological conditions, such as malaria and sickle cell disease. Dr. Qiang research integrated both experimental and computational methods to uncover how mechanical forces affect red blood cell lifespan and lead to hemolytic disorders. In his prior research work, Dr. Qiang has developed many bio-inspired microdevices allowing for precise spatio-temporal recapitulation of physiological microenvironment, and simultaneous phenotyping of blood cells at single cell and sub-cellular level. In addition, Dr. Qiang is passionate about the education of the next-generation scholars in the field of biomedical engineering. Dr. Qiang has been teaching courses of *Biomechanics*, *Biomedical engineering lab* and *Dynamics*, etc. He is also actively creating innovative courses and research projects aimed at engaging the biomedical engineering community.