TEXAS TECH UNIVERSITY
Department *of* Computer Science

Towards a Better Camera

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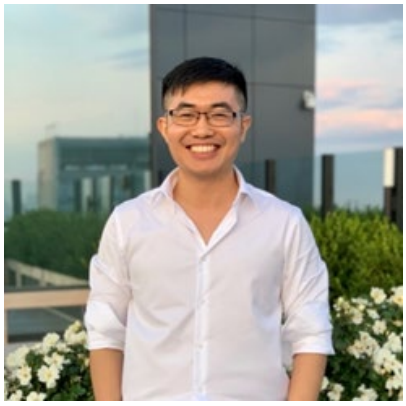
Snap Inc.
Tuesday, September 19, 2023
3:30 p.m.
BIOLOGY LH100 or Zoom

Abstract: With 397 million daily active users (DAUs, Q2 2023), Snapchat's camera stands as one of the most widely utilized cameras today. Our users rely on this camera to capture moments, express themselves, communicate visually, embrace the present, explore the world, and enjoy shared experiences. We empower the camera to cater to these diverse needs through our cutting-edge camera technology. In this presentation, I will unveil a series of our endeavors aimed at enhancing the camera's capabilities. Firstly, I will discuss our efforts to improve the camera's image quality. Secondly, I will delve into initiatives to inject more excitement into the camera through the addition of special filters. Thirdly, I will explore how we have integrated additional hardware to create superior 2D and 3D cameras which can also be used in our next-generation AR glass. Finally, I will touch upon our innovations in detecting transparent objects, developing transparent displays, and crafting transparent cameras.



Bio: Jian (James) Wang is currently a Senior Research Scientist at Snap Inc. He is mainly interested in computational photography (e.g., image/video restoration and enhancement, image/video generation and editing, etc.) and computational imaging (e.g., co-design the hardware and software for better 2d/3d imaging). Before joining Snap, Jian earned his Ph.D. degree from Carnegie Mellon University, He has published papers in top-tier places such as CVPR, MobiCom, Siggraph, etc. He has received best paper award from the 4th IEEE International Workshop on Computational Cameras and Displays and best poster award from IEEE Conference on Computational Photography 2022.