

# AI-Powered Cameras for Smart Home Security



## Biography

Dr. Lin Chen is the Chief Scientist at Wyze, leading the AI and Subscription Engineering Team. He earned his Ph.D. from the School of Computer Engineering at Nanyang Technological University in 2014 and his B.Eng. from the Department of Electronic Engineering and Information Science at the University of Science and Technology of China (USTC) in 2009. Lin has contributed to over 20 papers in prestigious journals and conferences, including CVPR, NeurIPS, T-PAMI, and T-MM. He is also the recipient of the 2014 IEEE Transactions on Multimedia Best Paper Award.

Before joining Wyze in 2020, Lin was a Principal Scientist at Futurewei (Huawei Research USA), where he spearheaded R&D in computer vision, product enhancement, new product launches, and exploration of new technological directions. Prior to that, he served as a Senior Applied Scientist at Amazon and AWS AI, contributing to AI model development and services for Amazon Product Search and AWS Rekognition Services. Earlier in his career, Lin was a Research Scientist at the Ocular Imaging Programme at the Institute for Infocomm Research (I<sup>2</sup>R), focusing on the use of AI to detect glaucoma based on fundus images.

## Dr. Lin Chen

**Date:** Jan 23, 2024  
**Time:** 1:30 pm - 2:20pm  
**Location:** MEB 106

## Abstract

Smart home cameras, increasingly popular in today's market, are typically equipped with a microphone and speaker, enabling them not only to see but also to hear and speak. The continuous advancements in AI have significantly enhanced the capabilities of these cameras, expanding their range of applications. Wyze, committed to making great technology accessible to everyone, disrupted the market by launching a \$20 smart home camera in 2017, a stark contrast to the typical \$200 price point. Today, Wyze cameras offer a wide array of features, including object and sound detection, smart vision, and more. They are used in various settings, such as home and community monitoring, baby monitoring, and elderly care. This talk will showcase the capabilities of Wyze cameras and delve into their development process. Additionally, with the emergence of Large Foundation Models, new opportunities have arisen. We will present some of the innovative projects Wyze is exploring using these advanced models.