MID-AMERICA CLUB
ITCONNECT

OCTOBER 20, 2021 | **6:00PM** | **THE MID-AMERICA CLUB**
HOSTED BY ACM CHICAGO | CO-HOSTED BY POLYMORPHIC SYSTEMS, INC.

DETECTING SYNTHETIC FACES BY UNDERSTANDING REAL FACES

TOPIC: Detecting Synthetic Faces
by Understanding Real Faces

SPEAKER: Dr. Shruti Agarwal
School of Information
University of California Berkeley

WHEN: October 20, 2021 – 6:00PM

WHERE: **Zoom Online Presentation**
RSVP or call **312.861.1100**

Dr. Shruti Agarwal Dr. Shruti Agarwal is currently a postdoctoral researcher in the School of Information at the University of California Berkeley (UCB). She received her Ph.D. from the Department of Computer Sciences at UCB under the supervision of Prof. Hany Farid in the field of multimedia forensics.Shruti previously worked as a software developer in the Adobe Illustrator team at Adobe, India. She received her master's and bachelor's degree in Computer Science from the Indian Institute of Technology (IIT) Delhi, India, and Harcourt Butler Technology Institute (HBTI), India. Her primary research interest lies in multimedia forensics, image analysis, machine learning, and computer vision.

Altering Reality

The creation of sophisticated fake videos has been largely relegated to Hollywood studios or state actors. Recent advances in deep learning, however, have democratized the creation of sophisticated and compelling fake images, videos, and audios. This synthetically generated media — so-called deep fakes — continue to capture the imagination of the computer-graphics and computer-vision communities.

At the same time, the easy access to technology that can create deep fakes of anybody saying anything continues to be of concern because of its power to disrupt democratic elections, commit small to large-scale fraud, fuel disinformation and misinformation campaigns, and create non-consensual pornography.

To contend with this growing threat, our speaker will describe a diverse set of techniques to detect state-of-the-art deep-fake videos. One set of these techniques are identity-specific, exploiting soft- and hard-biometric cues like dynamic facial motion and static facial appearance. Another set of these techniques are identity-independent, exploiting the dynamics of lip and ear motion.

Join Us As We Detect Deep-Fakes

In this talk, Dr. Agarwal will explore the possibilities of deep-fake technologies, their numerous problems, and the latest measures for identifying their usage.

About The School of Information, UC Berkeley

The School of Information, UC Berkeley is our newest professional school. Located in the center of campus, the School is a graduate research and education community committed to expanding access to information and to improving its usability, reliability, and credibility while preserving security and privacy. This requires the insights of scholars from diverse fields — information and computer science, design, social sciences, management, law, and policy.

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Polymorphic Systems offers application development services to help clients design, develop, and maintain their solutions.