Department of
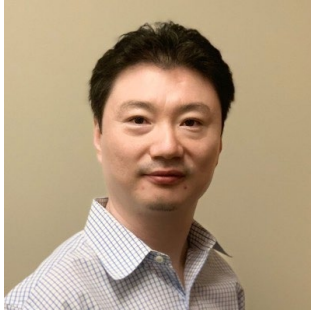**Information Science Technology**
Cullen College of Engineering

IST Seminar Series Presents:

The Industrial Applications of Generative AI

Dr. Yingwei Yu

Sr. Applied Scientist @ Amazon Web Services (AWS) | Generative AI Innovation Center

Friday, February 16, 2024 from 11:00AM-12:00PM (Central Time)

➢ **Join In-person**: AMG 200

➢ **Join Online:** MS Teams (see link below)
https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZTU1ZWU2MmYtZWNlZS00YWM1LTg1ZGUtYjBlMTRmNWYzZTVm%40thread.v2/0?context=%7b%22Tid%22%3a%22170bbabd-a2f0-4c90-ad4b-0e8f0f0c4259%22%2c%22Oid%22%3a%22c9f8dd10-bdbf-4c7a-bc65-d4bc72037cbe%22%7d

Abstract: In this seminar, we will explore the applications of generative AI, a revolutionary branch of artificial intelligence that diverges from traditional machine learning by generating new, unique data instances. We will discuss its diverse industrial applications, from content creation to complex problem-solving, and delve into some main techniques used for application development like Retrieval Augmented Generation (RAG), text-to-SQL, and text-to-Python. Using the Oil & Gas sector as a case study, we'll illustrate how generative AI can optimize exploration and production by simulating geological formations. Additionally, we'll briefly introduce how AWS's Generative AI services are making these advanced capabilities accessible to industries, enabling innovation and operational transformation. Join us to uncover the transformative potential of generative AI across various sectors.

Biosketch: Yingwei Yu holds a PhD in Computer Science from Texas A&M University. He is a Sr. Applied Scientist at Generative AI Innovation Center, Amazon Web Services (AWS). He has experience working with several organizations across industries on various applications in machine learning, including reinforcement learning, large language models, time series analysis, and predictive maintenance.