**Dissertation Defense Announcement**

**Candidate**: Albert J. Parvin Jr.

**Chair of Committee**: Dr. Mario G. Beruvides

**Committee Members**: Dr. Jennifer A. Cross, Dr. Bryan A. Norman, & Dr. Victor G. Tercero-Gomez

**Title of Dissertation**: Macro Examination of Technological Innovation Diffusion Rates and Abandonment Assessment

# Abstract:

Macro-level trends and patterns are commonly used in business, science, finance, and engineering to provide insights and estimates to help decision-makers make informed decisions. This research effort explored and developed macro-based perspective knowledge to provide decision-makers with general system-level intelligence towards assessing technological innovation abandonment. The research drives to create value through knowledge gained via the macro-perspective exploration of factors to improve abandonment assessment, enable abandonment optimization, enable proactive abandonment decisions, and reduce abandonment assessment complexity. Specifically, the overall endeavor strives to create and support macro-based knowledge to address the optimal point of abandonment of a technological innovation, and the economic impact of the speed at which the abandonment decision is made. This effort explores factors and relational assessment areas common to each in a series of three research paper explorations to build and develop macro-based technological innovation abandonment intelligence. This research offers several significant contributions to the macro-level understanding of technological innovation abandonment assessment, including; the boundaries and likelihood of achieving a range of technological innovation diffusion rates, the impact of three factors on abandonment optimization, namely, a technological innovation’s diffusion rate, a technological innovation’s probability of achieving a given diffusion rate, and the point of abandonment; and the development of a framework for accessing in-situ (real-time) a technological innovation’s diffusion rate percent-error.

# Date: October 11, 2021

# Time: 2:30 p.m. Central Time

# Location: Room 235, IMSE building

# Zoom Link:

[https://texastech.zoom.us/j/96347593099?pwd=MVNPZVlMVU9odTl6dXRyWlN2ekZ6QT09](https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Ftexastech.zoom.us%2Fj%2F96347593099%3Fpwd%3DMVNPZVlMVU9odTl6dXRyWlN2ekZ6QT09&data=04%7C01%7Calbert.parvin%40ttu.edu%7C0972db2634294e52220308d97d1dff06%7C178a51bf8b2049ffb65556245d5c173c%7C0%7C0%7C637678390057599659%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=Gb1xAYVYwjlYZiJJUCu2mLnvSqwLfHNVYoTabX0fua4%3D&reserved=0)

Meeting ID: 963 4759 3099

Passcode: 978000