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TEXAS A&M UNIVERSITY
Department of Electrical & Computer Engineering

S E M I N A R

Room 1020 ETB

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Characterization and Experimental Implementation of a Quantum Perceptron

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Abstract: In this talk, I will cover an implementation of a multidimensional input quantum perceptron algorithm is demonstrated both in python simulation as well as experimentally running on the IBM Quantum Experience platform. I have implemented the bias for the quantum perceptron via an independently controlled input neuron. Consequently, this study gives insight into how quantum neurons interact with one another and how this algorithm would behave as it scales. Finally, I will discuss an application for this algorithm in quantum image processing

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Andrew Schall received his B.S. in physics from Wake Forest University. He is currently a Master of electrical engineering student at Texas A&M and has recently defended his thesis on characterization of a quantum perceptron.