



TEXAS A&M UNIVERSITY

Department of Electrical
& Computer Engineering

TRANSFORMING ENGINEERING EDUCATION

ENERGY & POWER GROUP SEMINAR

Enhancing Future Power System Infrastructure Performance with Evolutionary Algorithms and Swarm Intelligence

Abstract

This seminar explores the innovative application of evolutionary algorithms and swarm intelligence in analyzing and improving the performance of future power system infrastructures. Drawing upon recent advancements and research, including insights from the application of genetic algorithms and evolutionary programming, we delve into how these sophisticated computational techniques can optimize, model, and solve complex problems in power systems. The seminar will highlight case studies and practical applications, demonstrating the potential of these methods to address challenges in energy distribution, load management, and renewable integration.



Luis Loo
Ph.D. Student
Texas A&M University

Friday, February 9
11:30 am
241 ZACH

Biography

Luis Loo, a Fulbright Scholar alumnus, completed his master's degree in computer engineering at the University of Pernambuco, Brazil, where he deepened his knowledge in evolutionary computation and swarm intelligence. Now a Ph.D. student in the ECEN Department at Texas A&M University, he applies these algorithms to develop data-driven solutions, exploring new possibilities and showcasing cutting-edge techniques in computational intelligence for energy systems. With a foundation in software engineering, data science, and teaching, Luis is driven by a passion for using data and technology to discover innovative approaches in his field.