ECE 590 I
POWER & ENERGY SYSTEMS SEMINAR

Monday, November 9, 2020, 3:00 – 3:50 p.m.

Zoom Meeting ID: 951 3947 9295
Password: power

An Overview of Exponent Engagements

Dr. Jay Prigmore and Dr. Erik Urban
Exponent

Abstract
Exponent is an engineering and scientific consulting firm with offices across the country and globe engaged in work
on many of the most challenging and prominent engineering and scientific problems in the world. This presentation
focuses on the wide range of opportunities in the problems and projects that the Electrical Engineering & Computer
Science Practice at Exponent undertakes. The presenters will discuss the set of desired skills and academic
background appropriate for the nature of the work of the firm. The presenters will discuss the nature and scope of the
engineering and scientific consulting projects and the challenges and opportunities of working at engineering
consulting firm.

Bio
Jay Prigmore, Ph.D., P.E. – Managing Engineer, Electrical Engineering and Computer Science Practice

Dr. Prigmore is a licensed Electrical Engineer with expertise in the fields of power systems, power electronics, power
markets, arc flash and arc blast, short-circuits, power system protection, fuses, circuit breakers, relays, magnetics,
electromagnetics, rotating electrical machinery (motors and generators), electrical current sensing technologies,
semiconductor device applications, explosives, HAZMAT shipping regulations, microcontrollers, circuit board
analysis, high power lab testing, standards testing, standards development and compliance. He has eight years’
experience in the development and implementation of short-circuit current limitation techniques and devices, which,
includes novel concepts of, fault current limiters and solid-state circuit breakers in addition to conventional
techniques. He has evaluated power systems and commissioned their components on six continents for a wide range
of industries, including mining, petrochemical, pulp and paper mills, and renewable energy installations. Dr. Prigmore
has the training necessary to climb wind turbines.

Erik Urban, Ph.D. – Scientist, Electrical Engineering and Computer Science Practice

Dr. Erik Urban has an extensive background in atomic physics, with expertise in the control and measurement of
trapped ions and in the development of related hardware and experimental systems. This experience includes
knowledge of radio-frequency electronics, PCB circuit debugging and design, electrostatic field simulations, optical
lasers, and ultra-high vacuum systems. At Exponent, he has assisted clients with projects relating to failure analysis
of consumer electronics, control systems, and automotive electronics.