



CEAR
CENTRO DE ENERGIAS
ALTERNATIVAS E RENOVÁVEIS



ESCOLA DE ALTOS ESTUDOS

**Smart Grid no contexto da Geração
Distribuída, Armazenamento de Energia e
Mobilidade Elétrica**

UNIVERSIDADE FEDERAL DA PARAÍBA

Centro de Energias Alternativas e Renováveis - CEAR
Programa de Pós-Graduação em Engenharia Elétrica

SMART GRID NO CONTEXTO DA GERAÇÃO DISTRIBUÍDA, ARMAZENAMENTO DE ENERGIA E MOBILIDADE ELÉTRICA

Seja parceiro deste evento

O Programa de Pós-Graduação em Engenharia Elétrica – PPGEE/UFPB, em parceria com os Programas de Pós-Graduação em: Modelagem Matemática, da UNIJUÍ/RS, e, Engenharia de Energia, da UFRN/RN, aprovou no final de 2018, o projeto intitulado Smart Grid no contexto da Geração Distribuída, Armazenamento de Energia e Mobilidade Elétrica. no âmbito do Edital CAPES nº 14/2018, Programa Escola de Altos Estudos – EAE.

O Programa Escola de Altos Estudos tem por objetivo apoiar os Programas de Pós-Graduação brasileiros e promover a realização de visitas de curta duração a Instituições de Ensino Superior (IES) e Institutos ou Centros de Pesquisa e Desenvolvimento públicos brasileiros, por professores e pesquisadores de reconhecido prestígio internacional, atuantes no exterior, em todas as áreas do conhecimento.

Neste sentido, o evento contempla a realização de seis cursos com duração de 20 horas cada por pesquisadores de renome internacional.

PARA MAIS DETALHES VISITE:
WWW.CEAR.UFPB.BR/EAE



CONHEÇAM NOSSOS VISITANTES



Prof. Dr. Vladimiro Miranda

INESC/TEC, Univ. do Porto, Porto, Portugal

Dates of Attendance: October 15 to 22.

Course Name: Information theory and cognitive models contributing to smarter networks.

Course Abstract: The basis of cognitive models; Construction of models; Information theory; Self-adaptive models.

Practical applications: a. Forecast of wind and solar energy; b. Forecast of consumption; c. Recovery of sensor signals; d. State estimation for large intelligent distribution systems and networks; e. Voltage control and reconfiguration; f. Identification of the state of keys; g. Diagnosis of faults in transformers, reliability and Monte Carlo and others; h. Systems training techniques, including "deep learning".

CONHEÇAM NOSSOS VISITANTES



Prof. Dr. Luis Almeida

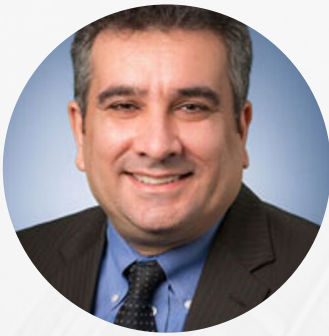
University of Porto , Portugal

Dates of Attendance: October 21 to 28.

Course Name: Real-Time Networks.

Course Abstract: Distribution is, nowadays, the de facto architectural choice in practically all computer-based application domains that support modern societies, from transportation to process control, factory automation, smart grids, and generally the Cyber-Physical Systems (CPS) domain. Distributed architectures place the underlying networks at the systems core, enabling the respective global behaviors and strongly impacting non-functional properties such as timing and fault-tolerance. This course will present an introduction to computer networks that are typical in CPS from a real-time perspective. The lectures include an initial presentation of general concepts in networks and then focus on the physical and data link layers, devoting particular attention to the medium access control. Then, the course will address the issue of traffic scheduling and its relationship with medium access control, showing typical schedulability analysis that can be used to derive a priori guarantees of traffic timeliness. A few paradigmatic protocols will then be presented and analyzed, including a reference to emerging real-time Ethernet profiles like the TSN set of standards, to the IEC 61850 standard for electrical substation communications, to the renewed interest on the Software-Defined Networking management paradigm and to the growing interest on wireless communication. Finally, the course will address a specific case study from the energy conversion domain, namely the design of a distributed architecture for a Multi-level Modular Controller.

CONHEÇAM NOSSOS VISITANTES



Prof. Dr. Ali Emadi

McMaster University, Ontário, Canadá

Dates of Attendance: November 03 to 09.

Course Name: Hybrid and electric vehicles.

Course Abstract: This course provides an overview of the current status and future trends in the transportation industry. It begins with the history of the automotive industry and explains the need for a paradigm shift toward a sustainable solution. Parallels with other industries such as the telecommunications industry are highlighted, and it is explained how providing greater levels of empowerment for consumers is a powerful driving force for the next generation of electrified vehicles. This empowerment is part of a new paradigm in energy integrated with renewable energy sources, distributed generation systems, and smart grid. The course is then focused on the transportation electrification and how the paradigm shift began with more electric vehicles (MEVs), established by hybrid electric vehicles (HEVs), is gaining momentum by plug-in hybrid electric vehicles (PHEVs), and will be completed by electric vehicles (EVs). The motivation for the research, development, and commercialization of EVs, HEVs, and PHEVs will be explained and role of electric motors, power electronics, and energy storage systems will be highlighted. Powertrain configurations and powertrain components will also be presented. Throughout the presentation, related component-level as well as system-level challenges are explained, and possible solutions are recommended. Unprecedented opportunities in the areas of power electronics and electric motors will be highlighted.

CONHEÇAM NOSSOS VISITANTES



Prof. Dr. Vincent Reinbold

University Paris-Saclay - France

Dates of Attendance: November 02 to 10.

Course Name: Optimization for Electric Engineering : Application to energy management of micro-grids and electric transportation.

Course Abstract: Present some fundamental notions of mathematical optimisation, such as: nature of problems, algorithms, tools and convergence properties. Give some insights and present numerical tools to enable students to apply those concepts to different engineering problems, including: energy management, power management or sizing problems. Present notions of energy and power management for micro-grids, storage systems, distributed renewable system, smart-grids and hybrid electric vehicles troughs some today's industrial or research examples. Enable students to implement energy management systems based on optimization for simple use-cases.

PLANO DE MÍDIA E MERCHANDISING

COMO AS MARCAS DOS PARCEIROS SERÃO DIVULGADAS NOS CURSOS

As marcas das empresas e instituições patrocinadoras serão visualizadas em todo o material gráfico do evento, tais como: site, pastas, crachás, vídeos, folders, banners, programação, etc.

Para garantir a realização de tão importante evento, é necessária a criação de parcerias com patrocinadores, para composição de um plano de mídia e divisão dos espaços de merchandising.

Cota Ouro - R\$ 6.000,00

- Uso da logomarca na home-page;
- Uso da logomarca na programação final;
- Uso da logomarca na transmissão online;
- Uso da logomarca no bloco de anotações;
- 1 banner institucional individual alocados nos corredores internos;
- Logomarca no painel de boas vindas;
- Logomarca em destaque no painel principal do Auditório;
- Abertura para apresentação oral no palco do evento dos produtos/serviços da empresa parceira no decorrer dos seis cursos.

Cota Prata - R\$ 3.000,00

- Uso da logomarca na home-page;
- Uso da logomarca na transmissão online;
- Logomarca no painel de boas vindas;
- Abertura para apresentação oral no palco do evento dos produtos/serviços da empresa parceira do decorrer dos seis cursos.

Cota Bronze- R\$ 1.500,00

- Uso da logomarca na home-page;
- Logomarca nos impressos;
- Logomarca no painel de boas vinda.

ESCOLA DE ALTOS ESTUDOS

O público do evento contará com profissionais do setor elétrico de todo o Brasil.

Todo o evento será transmitido via WEB, aumentando ainda mais a visibilidade de sua marca.

Dessa forma, solicitamos desta tão conceituada empresa a tão necessária contribuição e parceria.



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