

Personal Information

Name / Surname Duygu Bayram
Birth Year / Place 1983 /Istanbul / TURKEY



Contact Information

Mailing Address ITU Ayazaga Campus, Electric Electronics Faculty,
Electrical Engineering Department, 34469, Maslak, Istanbul
TURKEY
E-mail Address bayramd@itu.edu.tr
Office +90 212 285 6736
Fax +90 212 285 6700
Web Address <http://faculty.itu.edu.tr/bayramd/>
<http://web.itu.edu.tr/bayramd/>

Educational Background

PhD

2009 - Istanbul Technical University – Electrical Eng.
Stationary Wavelet Transform for Fault Detection and Statistical Analysis in Induction Motor (IM)
My PhD thesis is about fault detection and Statistical Analysis of IM using signal processing techniques and functional analysis principals. Stationary Wavelet Transform (SWT) is employed to obtain the subbands of the data and trends of data are calculated using these subbands. Then these trends related to each data are used to create a 2D Euclidian space and to determine the critical region, which is crucial by means of condition monitoring. During the study, redundancy property of SWT and the Wavelet Based Trend Analysis are investigated in order to define the critical region in which any fault is expected.

MSc

2006 – 2009 Istanbul Technical University – Electrical Eng.
Finite Element Analysis of Effects of Time Harmonic Voltages on Squirrel Cage Induction Machine (IM)
Voltage sources with various time harmonics components have been applied to an IM in computer environment. Then, performance plots and field distributions are obtained for each problem using FEM. As a contribution, a detailed comparison is done between analytical facts and simulation results.

BSc

2001 - 2006 Istanbul Technical University – Electrical Eng
Design of Squirrel Cage IM
The Project answers how to design and project an IM and calculates the magnetic, electrical and physical parameters.

High School

1994 – 2001 Burak Bora Anatolian High School
(Foreign Language: French)

Areas of Interest

Signal Processing, Soft Computing, Condition Monitoring, Electric Machinery, Renewable Energy

Work Experience

Istanbul Technical University Research Assistant since 2007
Electrical Engineering Department
Electrical and Electronics Faculty

Assistant to the lectures

- Probability and Statistics:
- Electrical Machinery I&II
- Electrical Machinery Lab I&II
- Windings on Electrical Machines
- Design of Power Transformer Project
- Power Electronics Lab.
- Fundamentals of Electrical Engineering

Qualifications

Foreign Languages

- English: Fluent
- French: Fluent
 - Certificat de Français Professionnel, Chambre de Commerce et d'Industrie de Paris, (October 2004)
 - Certificat de Langue Française, Niveau Supérieur, Cours de Civilisation Française de la Sorbonne, (August 2005)

Computer Skills

MATLAB, Ansoft MAXWELL & RMxpert, FEMM, Autocad, COMSOL, PSIM

Club Memberships

ITU Alternative Energy Club (ITU ALEK)
Chair Person since April 2010

- Technical Project:
 - Electric Vehicle (ITUEV) – Electric Motor Design Team
- Social Responsibility Project:
 - EU Sustainable Energy Week 2011 – Santralistanbul Energy Week, as the Solution Partnership
 - Science and Fun Day 2011 – Koc University As the Participant and Solution Partnership

Hobbies

Pilates, Reading, Dancing, Swimming.