Metin VURAL

E-mail: vuralmeti@itu.edu.tr

CONTACT	*****Strasse *, Apartment *, ***** Berlin
PERSONAL INFORMATION	Date of Birth : **** Place of Birth : Erzurum/TURKEY Website : web.itu.edu.tr/vuralmeti Mobile Phone: ****

EDUCATION

Berlin Technical University, Berlin, Germany — 2014 October-Present
Ph.D. in Communication Engineering

Istanbul Technical University (ITU), Istanbul, Turkey — 2012-2014
M.Sc. in Communication Engineering
- GPA: ***
- Thesis: Lognormal Mixture Shadowing,
  Supervised by Assoc. Prof. Güneş Karabulut Kurt

Istanbul Technical University (ITU), Istanbul, Turkey — 2008-2012
B.Sc. in Electronics Engineering
- GPA: ***
- Thesis: Analysis of ZigBee in Smart Grid Applications
  Supervised by Assoc. Prof. Güneş Karabulut Kurt

Braunschweig Technical University, Braunschweig, Germany — 2010-2010
B.Sc. in Electronics Engineering
- Erasmus Exchange Program

Istanbul Technical University (ITU), Istanbul, Turkey — 2006-2008
B.Sc. in Electical Engineering

İbrahim Hakkı Science High School, Erzurum, Turkey — 2005-2006

Nevzat Ayaz Science High School, Erzincan, Turkey — 2002-2005

RESEARCH INTEREST

Mobile and Personal Communication, Satellite Communication Systems, Network Planning and Management, Statistical Signal Processing, Machine Learning, Image Processing

AWARDS AND ACHIEVEMENTS

BIDEB Graduate Priority Subject Areas Scholarship from TUBITAK
- For studying about priority subject areas and having inventive thesis subject, includes monthly stipend for 12 months.

INTERN EXPERIENCE

TUBITAK-The Scientific and Technological Research Council of Turkey,
Gebze, Kocaeli — August-September 2010
- Designing, controlling and testing power conditioning units (DC-DC and DC-AC converters) of the fuel cells.

WCRL-ITU Wireless Communication Research Laboratory,
Istanbul Technical University, Istanbul — July 2011
- Designing and simulating of ZigBee by using MATLAB/Simulink

Group Arge Energy ve Control Sistems Company,
Istanbul — June-July 2012
- Creating ZigBee models for Smart meter applications and performance analysing

WORK EXPERIENCE

Yapı Kredi Bank (YKB), Gebze, Kocaeli — August 2013-February 2014
Part Time Engineer at R&D Department
- Team member of an R&D project funded by TUBITAK on forecasting and data analysing

PUBLICATIONS

Metin Vural, Peter Jung, Sławomir Stańczak, "A New Outlier Detection Method Based on Anti-Sparse Representations," *IEEE 25ᵗʰ Signal Processing and Communications Applications Conference (SIU 2017)*, Antalya, May 2017.

Metin Vural, Peter Jung, Sławomir Stańczak, "Effect Of Anti-Sparse Prior on PAPR Performance Analysis," *IEEE 25ᵗʰ Signal Processing and Communications Applications Conference (SIU 2017)*, Antalya, May 2017.

Metin Vural, Peter Jung, Sławomir Stańczak, "On Some Physical Layer Design Approaches for MTC in Existing and Near-Future Small-Cell Networks," *20th International ITG Workshop on Smart Antennas (WSA 2016)*, Munich, Germany.

Metin Vural, Güneş Karabulut Kurt, Christian Schneider, "The Effect of Shadow Fading Distributions on Outage Probability and Coverage Area," *IEEE Vehicular Technology Conference (VTC 2015-Spring)*, Glasgow, Scotland 2015.

Saliha Büyükçorak, **Metin Vural**, Güneş Karabulut Kurt, "Lognormal Mixture Shadowing," *IEEE Transactions on Vehicular Technology*, vol.64, no.10, pp.4386-4398, Oct. 2015.

Metin Vural, Pamir Erdem, and Onur Ağın, "Regression Clustering With Lower Error via EM Algorithm," *IEEE Conference on Signal Processing, Communications, and their Applications (SIU 2014)*, Trabzon, April 2014.

Metin Vural, and Güneş Karabulut Kurt, "Effect of cooperative communications on power consumption in smart grid," *IEEE Conference on Signal Processing, Communications, and their Applications (SIU 2013)*, Cyprus, April 2013.

Zeynep Özdemir, **Metin Vural**, Özge Cepheli, and İbrahim Hökelek, "Performance Analysis of Wireless Sensor Networks by Using NS-2," *2013 European Conference of Technology and Society (EuroTecS-2013)*, Sarajevo, Bosnia, June 2013.

N. Uçar, G. Karabulut, B. Yağcı, B. Görgün, O. Ceylan, **M. Vural**, B. Badur, B .Başkan, S.Cakın, C. Bozkurt, E. G. Akay, "Monitoring The Vital Signals: Smart Garment For Temperature Sensing Sensor Networks," *5th International Technical Textiles Congress*, İzmir, November 2012.

SELECTED COURSE PROJECTS

Telecommunication Network Planning and Management
- Performance Analysis of Wireless Sensor Networks by Using NS-2,
  supervised by İbrahim Hökelek (TUBITAK-Bilgem)

Satellite Communication Systems
- A Survey on Mobile Satellite Systems,
  supervised by Prof. Tayfun Günel

Statistical Signal Processing
- Canny Edge Detection Enhancement with Scale Multiplication,
  supervised by Assoc. Prof. Işın Yazgan Erer

Image Processing
- Image Segmentation and Noise Reduction by Using Expectation Maximization Algorithm for Gaussian Mixture Models,
  supervised by Assoc. Prof. Ender Mete Ekşioğlu

Mobile and Personal Communications
- Flow Size Estimation and Modeling the Data Trafic with MAVAR Calculations,
  supervised by Assoc. Prof. Güneş Karabulut Kurt

RELATED COURSEWORK

Graduate
- Statistical Signal Processing
- Telecommunication Network Planning and Management
- Satellite Communication Systems
- Detection & Estimation Theory
- Information Theory
- Mobile and Personal Communications
- Image Processing
- Probability Theory and Stochastic Processes

Undergraduate
- Signals and Systems
- Probability & Statistics
- Telecommunication Engineering Basics
- Theory of Complex Functions
- Linear Algebra and Applications
- Calculus
- Communication Electronic Circuits
- Digital Communications
- Data Communications

TECHNICAL SKILLS

Programming
- Java (Beginner), C, C# (Beginner), Assembly (Beginner)

Development Environments
- MATLAB, Simulink, Ms Visio, Ms Office, Latex, QlikView

EDA (Electronic Design Automation) Tools
- Pspice, Proteus, Xilinx

Operating Systems
- Windows, MacOS

LANGUAGES

Turkish (Native), English (Advanced), German (Beginner)

OTHERS

BPSK, QPSK and OQPSK modulation simulation models are designed by using MATLAB/Simulink.
- Can be downloaded from the link: MATLAB Central/File Exchange

ZigBee simulation model is designed by using MATLAB/Simulink.
- Can be downloaded from the link: MATLAB Central/File Exchange

Image transmission over BPSK modulated channel model is designed by using MATLAB/Simulink.
- Available upon request.

A solar photovoltaic cell model is designed by using MATLAB/Simulink.
- Available upon request.

TU Braunschweig Grundstufe 2 Certificate	April 2010-July 2010
Java Training for Communication Certificate	Nov. 2012-Feb. 2013

Member of ITU Astronomy Club

Member of ITU Erasmus Club (Participated Erasmus Buddy/Tutor Project)

REFERENCES

Available upon request.

TRANSCRIPT

Available upon request.

GOOGLE SCHOLAR

Google Scholar Page.