

Dr. ARIF SELCUK OGRENCI



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EDUCATION:

- 1995-1999 Bogazici University, Department of Electrical and Electronics Engineering, PhD Program, PhD Thesis: Multilayer Perceptron Neural Network in Analog VLSI: A System Level Study
- 1992-1995 Bogazici University, Department of Electrical and Electronics Engineering, MS Program, MS Thesis: Application of Spline Integration Methods with Waveform Relaxation Techniques in Analysis of VLSI Circuits
- 1987-1992 Bogazici University, Department of Electrical and Electronics Engineering, BS Program, Department of Mathematics (BS in Double Major Program), Honors student, 3.03/4.00
Graduation Project: Design of a Stereo Encoder
- 1980-1987 Istanbul (Erkek) High School
- 1975-1980 Bahcelievler Primary School

PROFESSIONAL EXPERIENCE:

- Nov. 1999 - ... Assistant Professor, Kadir Has University, Department of Electrical-Electronics Engineering
Director of BYS (Bilgi Yönetim Sistemi-Knowledge Management System) (2001-2015)
- 1992-1999 Research Assistant, Bogazici University,

AWARDS and RECOGNITIONS:

- Vehbi Koc Foundation, Superior Performance Award for being in the top 20 in the University Entrance Examination, 1987-1992.
- Kadir Has University Certificate of Appreciation for the Successful Work in Knowledge Management System (2003), Academic Success (2004), Successful Work in Interface Development for the Knowledge Management System (2005), High Performance in Putting Kadir Has University on the Map (2007 and 2008), High Performance (2009)
- Award for the Best Design Project under Supervision, in Computer Engineering: 2004, 2009, 2012, 2017 (second degree); in Electrical-Electronics Engineering: 2017, 2018.
- Kadir Has University Education Award, 2014-2015

TECHNICAL-PROFESSIONAL TRAINING:

- Nov. 1998 Short course on “Mixed Signal ASIC Design Using the Mentor Graphics Design Kit for Alcatel Microelectronics Technologies”, IMEC, Leuven, Belgium.
- Nov. 1998 Short course on “Estimating and Preventing Mismatch in Analog Design” , IMEC, Leuven, Belgium.

Oct. 1999- Apr. 2000 Oracle Application Development Courses (Introduction to SQL and PL/SQL, Develop PL/SQL Program Units, Oracle Forms-I, Oracle Forms-II, Oracle Reports), OCP (Oracle Certified Professional, Application Development), Istanbul, Turkey.

Sept. 2001- Feb. 2002 Cisco Networking Academy Program, Semester 1-4 Instructor Training, obtained the certificate of CCNA Instructor, Istanbul, Turkey.

Jan. 2003 Oracle Portal, Istanbul, Turkey.

Feb. 2004 Active Learning Workshop, Istanbul, Turkey.

Jan. 2005 Cisco-CNAP, Cisco Certified Network Associate Instructor Training Update, Semesters 1-4, Istanbul, Turkey.

Feb. 2006 TÜBİTAK Training for Project Proposal Writing, Istanbul, Turkey.

Nov. 2007 IGIP Course on Engineering Education, Istanbul, Turkey.

Jan. 2008 UYBHM 2008 Winter Workshop for High Performance Computing and Parallel Programming, Istanbul, Turkey.

Apr.-Jun. 2008 PMP, Project Management, Mentor, Istanbul, Turkey.

Nov. 2009 Workshop on IEEE Technical English Program, Saint Petersburg, Russia.

July 2010 TOBB-CISCO Entrepreneurship Program: Enterprise Management in IT Era, Istanbul, Turkey.

Apr. 2011 Internal Corporate Communication, Kadir Has University, Istanbul, Turkey.

Nov. 2012 Around the Globe and Around the Clock: The Science and Technology of the CTBT (Comprehensive Nuclear-Test-Ban Treaty), CTBT Organization, Vienna, Austria.

Sept. 2013 Oracle BI (Business Intelligence) 11g R1: Create Analyses and Dashboards, Instructor Training, İstanbul., Turkey.

May-June 2015 First Aid, SOS

July-Aug. 2016 Work Health and Safety e-certificate Program, Anadolu University

July 2017 First Aid,

July 2017 Unwritten rules and ways of participation in Horizon 2020: Project design, consortium and profile development, (Sistem Global and KHÜ)

December 2017 Work Package Planning and Budgeting for Participation to H2020 Consortiums

September 2019 Applied Entrepreneurship Training, certificate by KOSGEB (Directorate for Developing and Supporting SME's)

September 2019 Successful Academic Writing and Publishing Skills Workshop, Charlesworth Knowledge

CERTIFICATES:

- OCP (Oracle Certified Professional), Internet Application Development
- CCNA (Cisco Certified Network Associate) Instructor
- First Aider
- Work Health and Safety
- Applied Entrepreneurship

RESEARCH PROJECTS:

10/1993 – 6/1995 Project member, “Parallel Techniques for Accelerating Simulation of MOS VLSI Circuits,” Boğaziçi University Research Fund.

2/1996 - 2/1998 Project member, “EEEAG-183: Realization of Artificial Neural Networks Using Analog Integrated Circuits,” TÜBİTAK (Turkish Scientific and Technical Research Council). (In this project, an analog neural network integrated circuit has been designed using Mentor Graphics IC Station software in Alcatel-Mietec’s 2.4µm technology, and it has been produced via the Europractise program.)

6/2014 – 12/2015 Project member, Self Learning for Mobile GSM Network (Identification of base station information from log data)

MS THESES ADVISED

Aysel Aydın, Business Process Management Standards, 2012

Aslı Yılmaz, Software Cost for SOA Age, 2012

Cihan Taşkın, Service Granularity for Transforming Legacy Systems to SOA, 2012

Zeynep Erol, Information System for Diseases, 2012

İbrahim Fırat Veral, Secure Loyalty Cards in Mobile, 2014

CV, Selcuk Ogrenci, 01.11.2019

Duygu Çolak, Concept Map Based Learning System, 2014
Engin Ozer, Analysis of Effects of Economics News on the Price Fluctuations in Bist100 and Stocks Prices, 2015.
Ramazan Cengiz, Location Estimation of Base Station of Mobile Phones Using Artificial Neural Networks, 2016.
Burcu Yılmaz, A Look at Risk Measurement Methods of Investment and Pension Funds in Turkey, and Prediction of Risk Including Credit Risk, 2016.
Ayşe Demirhas, Usage of Information Technologies in Container Shipping Industry and Impacts on Business: An ERP Solution, 2017.
Recep Çifci, Smart Chatbot, 2018.
Subhan Rana, Load Flow Based Electrical System Design and Short Circuit Analysis, 2019
Taha Al-Bayati, Anomaly Detection in Time Series, 2019
Mostafa Ziaadon Ibrahim Ibrahim, Peer to Peer and Master-Slave Topologies For Edge Computing in Internet of Things, 2019
Uygar Şahin, Log Analysis with Anomaly Detection, 2019

RESEARCH INTERESTS:

- Computational intelligence, machine learning, IoT, data processing for event/anomaly detection, effective teaching

PUBLICATIONS:

BOOK

- Sina Balkır, Günhan Dünder, A. Selçuk Öğrenci, **Analog VLSI Design Automation**, CRC Press, June 2003.

JOURNAL PAPERS

- İ. Bayraktaroğlu, A.S. Öğrenci, G. Dünder, S. Balkır, E. Alpaydın, "ANNSyS:An Analog Neural Network Synthesis System", *Neural Networks*, pp. February, 1999. (SCI)
- A.S. Öğrenci, G. Dünder, S. Balkır, "Fault Tolerant Training of Neural Networks in the Presence of MOS Transistor Mismatches," *IEEE Transactions on Circuits and Systems-II: Analog and Digital Signal Processing*, Vol.:48, No:3, pp. 272-281, March 2001. (SCI)
- A.H. Bilge, O. Pekcan, S. Kara, A.S. Öğrenci, "Epidemic models for phase transitions: application to a physical gel," *Phase Transitions*, Vol.:90, No:9, pp. 905-913 <http://dx.doi.org/10.1080/01411594.2017.1286487>, 2017. (SCI)
- A. S. Öğrenci, T. Arsan, "Transmitter source location estimation using crowd data," *Computers & Electrical Engineering*, ISSN0045-7906, Vo.:66, No:2, pp. 127-138, <https://doi.org/10.1016/j.compeleceng.2017.09.026>, 2018. (SCI-Exp)
- A.S. Öğrenci, O. Pekcan, S. Kara, A.H. Bilge, "Mathematical Characterization of Thermo-reversible Phase Transitions of Agarose Gels," *Journal of Macromolecular Science, Part B*, Vol:57, No:5, pp. 364-376, DOI:10.1080/00222348.2018.1463052, 2018. (SCI-Exp)
- A.H. Bilge, A.S. Öğrenci, O. Pekcan, "Mathematical Models For Phase Transitions In Biogels," *Modern Physics Letters B*, DOI: [10.1142/S0217984919501112](https://doi.org/10.1142/S0217984919501112) , 15.3.2019, 2019. (SCI)

CONFERENCE PAPERS

- A.S. Öğrenci, S. Balkır, "Bezier function based waveform relaxation techniques for the simulation of MOS VLSI circuits," ESS'95: European Simulation Symposium, Erlangen, Germany, 1995.
- A.S. Öğrenci, G. Dünder, "SAFANN (Silicon Assembler For Analog Neural Networks)," TAINN'96: Turkish Artificial Intelligence and Neural Networks Symposium, Istanbul, Turkey, 1996.
- İ. Bayraktaroğlu, A.S. Öğrenci, G. Dünder, S. Balkır, E. Alpaydın, "On-Chip Training by Software for Analog Neural Networks Using ANNSyS," 6th NASA Symposium on VLSI Design, pp. 910-915, Albuquerque, USA, 1997. DOI: 10.1109/ICNN.1997.616146
- A.S. Öğrenci, G. Dünder, S. Balkır, E. Alpaydın, "Training of Multilayer Artificial Neural Networks with Nonlinear Multipliers in Analog Integrated Circuits," SIU'97: Sinyal İşleme ve Uygulamaları Konferansı, Kuşadası, Turkey, 1997. (in Turkish)
- I.G. Erten, A.S. Öğrenci, G. Dünder, "A Compaction Algorithm for SAFANN," Proceedings of the 6th Turkish Symposium on Artificial Intelligence and Neural Networks (TAINN'97), pp. 311-316, Ankara, Turkey, 1997.

- İ. Bayraktaroğlu, A.S. Öğrenci, G. Dündar, S. Balkır, E. Alpaydın, "ANNSyS (An Analog Neural Network Synthesis System)", ICNN'97: IEEE International Conference on Neural Networks, Houston, USA, 1997.
- A.S. Öğrenci, M.R. Becer, G. Dündar, S. Balkır, "Incorporating MOS Transistor Mismatches into Training of Analog Neural Networks", NC'98: ICSC/IFAC Symposium on Neural Computation, Vienna, Austria, 1998.
- G. Coşgöl, A. S. Öğrenci, G. Dündar, "Neural Network Based CAD Tool for Modeling Manufacturing Variations in MOS Devices," Proceedings of the 8th Turkish Symposium on Artificial Intelligence and Neural Networks (TAINN'99), pp. 202-209, Istanbul, Turkey, 1999.
- İ. C. Çevikbaş, A.S. Öğrenci, G. Dündar, S. Balkır, "VLSI Implementation of GRBF (Gaussian Radial Basis Function) Networks," ISCAS'2000 International Symposium on Circuits and Systems, Geneva, Switzerland, May 2000. DOI: 10.1109/ISCAS.2000.856143
- D. Albuz, A.S. Öğrenci, G. Dündar, "Using Sensitivity Analysis for Weight Quantization," Proceedings of the 9th Turkish Symposium on Artificial Intelligence and Neural Networks (TAINN'2000), pp. 127-136, Izmir, Turkey, 2000.
- E. Karakuş, A.S. Öğrenci, G. Dündar, "Parameter Quantization Effects in Gaussian Potential Function Neural Networks," NNA2001 (2001 WSES International Conference on Neural Networks and Applications), Puerto de la Cruz, Spain, February 2001.
- T. Arsan, A.S. Öğrenci, İ.A. Yılmaz, "Kadir Has University Oracle Academic Initiative," AB'2001: Akademik Bilişim 2001, Samsun, Turkey, 1-2 February 2001. (in Turkish)
- A.S. Öğrenci, "System Level Requirements for Molecular Computing Architectures in Realizing Information Processing Systems", NATO-ASI, Molecular Electronics: Bio-sensor and Bio-computer, Pisa, Italy, 24 June - 4 July 2002.
- A. Bürümcek, A.S. Öğrenci, "Analysis of Square Root Function Design and Optimization in FPGAs," DSD2003 (EUROMICRO Symposium On Digital System Design), Antalya, Turkey, 1-6 Sept. 2003.
- A.S. Öğrenci, T. Arsan, T. Saydam, "An Open Software Architecture of Neural Networks: NeuroSoft," SEA2004 (IASTED Conference on Software Engineering and Applications), Boston, USA, 9-11 Nov. 2004.
- T. Arsan, A.S. Öğrenci, T. Saydam, "A Systems Software Architecture For Training Neural, Fuzzy Neural And Genetic Computational Intelligent Networks," WCCI2006 (World Congress on Computational Intelligence, 2006 International Joint Conference on Neural Networks), pp. 5275-5280, Vancouver, Canada, 16-21 July 2006. DOI: 10.1109/IJCNN.2006.247282
- A.S. Öğrenci, "Abstraction in FPGA Implementation of Neural Networks," *The 9th WSEAS International Conference on NEURAL NETWORKS (NN'08)*, Sofia, Bulgaria, May 2-4, 2008.
- A.S. Öğrenci, "Empirical results about efforts for effective teaching to y-generation freshman students," 11th International Conference on Information Technology Based Higher Education and Training (ITHET 2012), Istanbul, Turkey, 2012. DOI: 10.1109/ITHET.2012.6246043
- A.S. Öğrenci, "Complex event post processing for traffic accidents," 13th IEEE International Symposium on Computational Intelligence and Informatics (CINTI 2012), pp. 341-345, Budapest, Hungary, 2012. DOI: 10.1109/CINTI.2012.6496787
- A.S. Öğrenci, "Why do students prefer search engines over academic databases," 12th International Conference on Information Technology Based Higher Education and Training (ITHET 2013), pp. 1-3, Antalya, Turkey, 2013. DOI: 10.1109/ITHET.2013.6671054
- A.S. Öğrenci, "Collaborative Peer Assessment in a Blended Learning Environment," Immersive Education Europe Summit (iEDE 2013), London, UK, 2013.
- A.S. Öğrenci, Z. Erol "Disease Information System Based on Web Services," 2014 7th International Conference on Computer Science and Information Technology (ICCSIT 2014), Barcelona, Spain, 2014.
- A. S. Öğrenci, "How to Prevent Students Falling Down in a Flipped Classroom," The Future of Education, Florence, Italy, 2015.
- A. Yesilkaya, O. Karatalay, A.S. Öğrenci and E. Panayirci "Channel Estimation for Visible Light Communications Using Neural Networks," WCCI2016: IEEE World Congress on Computational Intelligence, pp. 320-325, Vancouver, 2016. 2016 International Joint Conference on Neural Networks (IJCNN) DOI: 10.1109/IJCNN.2016.7727215
- J. Dorner, S. Favrichon and A.S. Öğrenci, "Weight Exchange in Distributed Learning," WCCI2016: IEEE World Congress on Computational Intelligence, pp. 3081-3084, Vancouver, 2016. DOI: 10.1109/IJCNN.2016.7727591
- M. T. Altabba, T. Ayabakan, A. S. Öğrenci, "Fuzzy Logic for Decision Extraction from Product Reviews," International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS 2017), Chennai, India, 1-2.8.2017.
- E. Cay, Y. Mert, A. Bahcetepe, B. K. Akyazi, A. S. Öğrenci, "Beacons for Indoor Positioning," Int. Conference on Engineering and Technology ICET17, Antalya, 21-23.8.2017
- O. Ulgen, A. S. Öğrenci, "Structured Learning Based Turkish Sentiment Analysis," ASYU2017 Innovations and Applications in Intelligent Systems, Alanya, 5-7.10.2017.

- A. S. Ogrenci, “Anomaly Detection in Walking Trajectory,” 26. IEEE Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU), İzmir, 2-5.5.2018.
- Arif Selçuk ÖĞRENCİ, Atilla ÖZMEN, Batuhan ALBAYRAK, Buket DARICI, Furkan KİRACI, Kerem ERTEZ, “Sickle Cell Anemia Detection,” TIPTEKNO2018 Konferansı, 8-10.11.2018, Kıbrıs
- Ayşenur Gilik, Batuhan Albayrak, Arif Selçuk Öğrenci, “Clustering of Countries using Computational Models,” INTERNATIONAL CONFERENCE ON THEORETICAL AND APPLIED COMPUTER SCIENCE AND ENGINEERING 2018, 23-24.11.2018, Ankara.
- Mhd Tahssin Altabbaa, Arif Selcuk Ogrenci, Erdal Panayirci, and H. Vincent Poor, “Sparse Channel Estimation for Space-Time Block Coded OFDM-Based Underwater Acoustic Channels,” 2018 IEEE Global Communications Conference (GLOBECOM), UAE, 2018.

COURSES OFFERED:

Undergraduate: Engineering Guide and Ethics, Electronic Circuit Components, Electronic Circuits, Electronic Circuits Laboratory I-II, Computational Intelligence, Database Management Systems, Programming with PL/SQL, Software Engineering, Database Application Development, Differential Equations, Information Technology, Numerical Analysis, Advanced Digital Design, Computer Architecture.

Graduate: Web Services, Business Intelligence and Data Warehouses, Application Development for SOA, Database Design and Management, Advanced Computational Intelligence, Neural Networks and Fuzzy Systems, Special Topics in Electrical-Electronics Engineering: IoT; Research Methods, Research Methods and Scientific Ethics

TECHNICAL TRAINING OFFERED:

Mentor Graphics Design Tools (1995)

Oracle Academy Training Courses (Introduction to SQL and PL/SQL; Develop PL/SQL Programming Units; Advanced SQL; Advanced PL/SQL; SQL Tuning; Forms; Reports) (2003-...) Strategy; Project Management; Ethics; (2015-...)

MEMBERSHIP:

MERLOT (2016-...) www.merlot.org, Online Educational Resources, task force in Information Technology (IT)

IEEE (1991-...): member in the societies of Education and Computational Intelligence
(Member of Administrative Committee in Turkey Section for 2010-2012)

ECSI (1999-2008) (European Electronic Chips and Systems Design Initiative)

Soft Computing Association (2001-2008)

FOREIGN LANGUAGES: English, German

ACTIVITIES:

Turkish music choir, basketball, running, orienteering, rowing, gardening.

PERSONAL INFORMATION:

Date of birth: 22.5.1969

Nationality: Republic of Turkey

Married, two children, military service completed, non-smoker, Class-B driving license (1992)