

CURRICULUM VITAE

Education:

Degree	Department/Program	University	Year
PhD	Department of Computation	University of Manchester Institute of Science and Technology (UMIST)*	Dec. 1996
MSc	Electrical and Electronics Eng. Dep.	Middle East Technical University	July 1991
BSc	Electrical and Electronics Eng. Dep.	Middle East Technical University	July 1988
High School Diploma	Mathematics Branch	Ankara Atatürk Anadolu High School	June 1984

* UMIST and Victoria University of Manchester are merged in 2004 and named as University of Manchester and the associated department was first structured as School of Informatics, which was later split into two and merged with School of Computer Science and Manchester Business School.

PhD Thesis and Supervisor:

Bazlamaççı, C.F., "Optimized network design: minimum spanning trees and minimum concave-cost problems, PhD Thesis, University of Manchester Institute of Science and Technology (UMIST), December 1996. Supervisor: Prof. Dr. Khalil S. Hindi

MSc Thesis and Supervisor:

Bazlamaççı, C.F., "A fast Fourier transform implementation and performance evaluation on a transputer based parallel computer system", MSc Thesis, Middle East Technical University, July 1991. Supervisor: Prof. Dr. Hasan Güran

Employment History:

Job Title	Place	Year
Full-time faculty (Prof. Dr.)	Izmir Institute of Technology, Computer Eng. Dep., İzmir, Turkey	2020-
Full-time faculty (Assoc. Prof. Dr.)	Middle East Technical University, Electrical and Electronics Eng. Dep., Ankara, Turkey	2010-2020
Visiting faculty (Asst. Prof. Dr.)	Middle East Technical University Northern Cyprus Campus, Electrical and Electronics Eng. Dep., Kalkanli, Guzelyurt, TRNC (Visiting Scholar)	Feb '09 – June '09
Full-time faculty (Asst. Prof. Dr.)	Middle East Technical University, Electrical and Electronics Eng. Dep., Ankara, Turkey	1997-2010
Military Service	Media Department, General Plan and Principles Div., Land Forces, Ankara, Turkey	1998
Part-time Researcher	Communication Systems and Data Networks Research Group, TUBITAK-BILTEN Information Technologies and Electronics Institute, Ankara, Turkey	1997-1998
Full-time faculty (Instr. Dr.)	Middle East Technical University, Electrical and Electronics Eng. Dep., Ankara, Turkey	1996-1997
Teaching Assistant	University of Manchester Institute of Science and Technology (UMIST), Computation Department, Manchester, England	1992-1996

Research Assistant	Middle East Technical University, Electrical and Electronics Eng. Dep., Ankara, Turkey (on leave to pursue PhD at UMIST)	1992-1996
Research Assistant	Middle East Technical University, Electrical and Electronics Eng. Dep., Ankara, Turkey	1990-1992
R&D Engineer	Aselsan Military Electronics Inc., Control Systems Dep., Ankara, Turkey	1988-1990
Technical Staff	Control Systems Dep., Communications Systems Dep., Ankara, Turkey	1986-1988

Major Interests and Research Areas:

Communication and Computer Networks

- *Synthesis and design*
- *Architectures and protocols*
- *Fast packet switching and processing systems*

Computer Systems Architecture and Hardware

- *Microprocessor systems and applications*
- *Reconfigurable systems*
- *Embedded systems*

Optimization, Graph Algorithms and Applications

- *Optimization theory and mathematical programming*
- *Algorithms and advanced data structures*

Date of Associate Professorship: 28 May 2010

Area of Associate Professorship: Electrical and Electronics Engineering

Sub-area of Associate Professorship:

- i. Communication and Computer Networks
- ii. Computer Systems Architecture and Hardware

Supervised PhD Theses:

Çelik, C., "Energy and buffer aware application mapping for network on chips", PhD Thesis, Middle East Technical University, February 2013.

Erdem, O., "Parallel and pipelining architectures for high speed packet forwarding", PhD Thesis, Middle East Technical University, September 2011 (*recipient of the "Thesis of the Year Award 2010-2011" by METU Graduate School of Natural and Applied Sciences*).

Say, F., "A reconfigurable computing platform for real time embedded applications", PhD Thesis, Middle East Technical University, September 2011.

Supervised MSc Theses:

Kocaay, A.B., "Boosting performance of HLS optimization for SoC based hardware accelerators", MSc Thesis, January 2020.

Toka, N.A., "Design and implementation of power quality monitoring system for distribution systems", MSc Thesis, September 2019.

Yılmaz, E., "Feasibility study for dynamic context switching in partially reconfigurable FPGAs", MSc Thesis, September 2019.

Cilasın, R., "An application-aware DRAM controller", MSc Thesis, September 2019.

Bekdemir, L., "Hybrid probabilistic timing analysis with extreme value theory and copulas", MSc Thesis, September 2019.

Uslu, Ç. "Optimizing core signal processing functions on a superscalar SIMD architecture", MSc Thesis, August 2019.

Sert, K., "NFA based regular expression matching on FPGA", MSc Thesis, September 2018.

Gözütok, A., "Data plane-based defense system against DDOS attacks for software defined networks", MSc Thesis, March 2018.

Efe, O., "Tool support for worst case end to end delay analysis of AFDX networks", MSc Thesis, February 2016.

Özcan, D., "Parallel rectilinear Steiner tree solution using GPGPU", MSc Thesis, December 2015.

Eylen, T., "One way active delay measurement with error bounds", MSc Thesis, August 2015.

Kocalar, G., "GF(2^m) multiplier implementation on a partially reconfigurable FPGA", MSc Thesis, May 2015.

Dikbayır, H.S., "A hybrid resource allocation system for cloud computing", MSc Thesis, September 2014.

Büyükşahin, M.U., "OpenCL implementation of Montgomery multiplication on FPGA", MSc Thesis, September 2014.

Tengilimoğlu, B., "Partially reconfigurable FPGA implementation of a real-time system", MSc Thesis, June 2014.

Özer, C., "A dynamic memory manager for FPGA applications", MSc Thesis, June 2014.

Soltani, A., "Flow initiation in software defined networking", MSc Thesis, Middle East Technical University, February 2014.

Baysal, D., "Trie-tree data structure for IP lookup in virtual routers", MSc Thesis, Middle East Technical University, January 2014.

Jarchlo, E.A., "Life-time sensitive weighted clustering algorithm on wireless sensor networks", MSc Thesis, Middle East Technical University, September 2013.

Rumelili, C.I., "Memory organization in pipelined hierarchical search structures for packet classification", MSc Thesis, Middle East Technical University, June 2013.

Yıldırım, S., "A true random number generator in FPGA for cryptographic applications", MSc Thesis, Middle East Technical University, December 2012.

Uğurel, G., "Benchmarking of Xilkernel, FreeRTOS and μ c/OS-II on the soft processor platform MicroBlaze", MSc Thesis, Middle East Technical University, June 2012.

Özkaner, A., "Prototype development and verification of an IP lookup engine on FPGA", MSc Thesis, Middle East Technical University, February 2012.

Kılınc, I.O., "FPGA implementation of a network-on-chip", MSc Thesis, Middle East Technical University, September 2011.

Akbaş, M.I., "Evaluation of core stateless guaranteed fair network architecture", MSc Thesis, Middle East Technical University, September 2006.

Cinel, S., "Sequential and parallel heuristic algorithms for the rectilinear Steiner tree problem", MSc Thesis, Middle East Technical University, September 2006.

Say, F., "*Minimum concave cost multicommodity network design problem*", MSc Thesis, Middle East Technical University, September 2005.

Bereketli, A., "*On QoS multicast routing protocols*", MSc Thesis, Middle East Technical University, September 2005.

Bayramoğlu, N.Y., "*Recursive shortest spanning tree algorithms for image segmentation*", MSc Thesis, Middle East Technical University, July 2005.

Çelik, C. "Performance analysis of reliable multicast", MSc Thesis, Middle East Technical University, December 2004.

Özbilgin, G., "Reroute sequence planning in multiprotocol label switching networks", MSc Thesis, Middle East Technical University, December 2004.

Öğünlü, B., "Lifetime analysis for wireless sensor networks", MSc Thesis, Middle East Technical University, August 2004.

Önal, K., "Internet multicast congestion control", MSc Thesis, Middle East Technical University, February 2004.

Kaçar, M.N., "A soho router implementation on Motorola MCF5272 processor and UCLinux operating system", MSc Thesis, Middle East Technical University, August 2003.

Yeler, T., "University course scheduling using a genetic algorithm", MSc Thesis, Middle East Technical University, December 2002.

Yılmaz, H., "Traveling salesman problem: Solution with branch and bound and data correction algorithms", MSc Thesis, Middle East Technical University, December 2001.

Karadeniz, B., "Lower bounds for the minimum span frequency assignment problem in cellular networks", MSc Thesis, Middle East Technical University, December 2001.

Öztürk, E., "Fairness in differentiated services architecture", MSc Thesis, Middle East Technical University, December 2001.

Ertem (Önem), D., "Minimum weight directed spanning tree problem with degree, hop and capacity constraint", MSc Thesis, Middle East Technical University, April 2001.

Funded Project Work:

Architecture and Performance Benchmarking Studies Phase 2, METU DSIM Research Project, Project No: 2020-03-01-2-00-001 (with Thales LAS France Inc.), **Project Manager and Principal Investigator**, November 2019 – July 2020.

Architecture and Performance Benchmarking Studies, METU DSIM Research Project, Project No: 2019-03-01-32-00-04 (with Thales LAS France Inc.), **Project Manager and Principal Investigator**, November 2018 – August 2019.

Monitoring and recording of low voltage distribution system, Tübitak 1503 project, Project No: 115E134 (with Aselsan Inc.), **Investigator**, February 2016 – March 2019.

Pre-analysis of a defense system (feasibility study for air and missile defense system) (for Aselsan Inc. via ParGe A.Ş.), **Investigator**, January 2015 – September 2015.

Communications infrastructure analysis (within the main project of 'Development of and sensor fusion algorithms, METU DSIM Project, Project No: SST-IA-2012-97 (for Aselsan Inc.), **Principal Investigator** (for comm. part), November 2012 – April 2014.

Pipelined divide-and-conquer multiplier design for finite field $GF(2^m)$ based on irreducible trinomials, METU Scientific Research Fund, Project No: BAP-03-01-2010-01, **Principal Investigator**, February 2010 - January 2011.

Narrowband command and control waveform development - phase 2, METU DSIM Project, Project No: 09-03-01-2-00-22 (for Aselsan Inc.), **Investigator**, 2010-2011.

Narrowband command and control waveform development, METU DSIM Project, Project No: 08-03-01-2-00-14 (for Aselsan Inc.), **Investigator**, 2009-2010.

Domain analysis for weapon systems software and development of a reference software architecture, METU DSIM Project, Project No: 07-03-02-1-00-19 (for Aselsan Inc.), **Investigator**, 2007-2008.

Development of a parallel graph algorithm for the rectilinear Steiner tree problem and its performance evaluation, METU Scientific Research Fund, Project No: BAP-2008-03-01-06, **Principal Investigator**, 1 January 2008 - 31 December 2008.

Administrative Duties:

University Level

Middle East Technical University, **METU Computer and Informatics Committee Member**, March 2011 - February 2020.

Faculty Level

Middle East Technical University, Engineering Faculty, **Faculty Executive Board Member**, May 2005-May 2008.

Department Level

Middle East Technical University, Engineering Faculty, Electrical and Electronics Eng. Dep., **Undergraduate Program Committee Member**, January 2018 - February 2020.

Middle East Technical University, Engineering Faculty, Electrical and Electronics Eng. Dep., **Coordinator for Information Technology Affairs**, November 2014 – February 2020.

Middle East Technical University, Engineering Faculty, Electrical and Electronics Eng. Dep., **Academic Recruitment Committee Member**, September 2013 - September 2016.

Middle East Technical University, Engineering Faculty, Electrical and Electronics Eng. Dep., **Undergraduate Program Committee Member**, June 2011 - September 2013.

Middle East Technical University, Engineering Faculty, Electrical and Electronics Eng. Dep., **Student Performance Evaluation Committee Member**, March 2009 - March 2015.

Middle East Technical University, Engineering Faculty, Electrical and Electronics Eng. Dep., **Vice Chair**, October 2005-December 2007.

Middle East Technical University, Engineering Faculty, Electrical and Electronics Eng. Dep., **Budget and Planning Committee Member**, 2003-2004.

Electrical Electronics Computer Engineering Education 1st Nat. Symp. – **Editor and Organizing Committee Member**, 2003.

Middle East Technical University, Engineering Faculty, Electrical and Electronics Eng. Dep., **Undergraduate Program Committee Member**, June 2001-2002.

Middle East Technical University, Engineering Faculty, Electrical and Electronics Eng. Dep., **Publicity and Public Relations Committee Member**, 1999-2000.

Middle East Technical University, Engineering Faculty, Electrical and Electronics Eng. Dep., **Computer Center Departmental Coordinator**, 2000-2005.

Scientific, Vocational and Social Memberships:

Institute of Electrical and Electronics Engineering (IEEE)

IEEE Computer Society

IEEE Communications Society

Association for Computing Machinery (ACM)

Operational Research Society

Chamber of Electrical Engineers

METU Alumni Society

UMIST Alumni Society

Honors, Awards and Scholarships:

“2014 Annual High Performance Award”, Middle East Technical University.

Supervisor of the “Best Thesis of the Year Award 2010-2011”, Middle East Technical University, Graduate School of Natural and Applied Sciences.

PhD Scholarship, Higher Education Council, Turkey, 1992-1996.

University Admissions Exam, High Achievement Award, Undergraduate Education Scholarship, Sabancı Holdings PLC, Turkey, 1984-1988.

Taught Courses (Undergraduate and graduate level):

Undergraduate

BIL256 Data Communications (Computer Eng. Dep., Başkent University)

Semester: 2000-1/2

Middle East Technical University, Engineering Faculty, Electrical and Electronics Eng. Dep.,

EEE248/CNG232 Logic Design (Electrical and Electronics Eng. Dep., METU Northern Cyprus Campus)

Semester: 2008-9/2

EE312 Digital Electronics (Electrical and Electronics Eng. Dep., METU)

Semester: 1996-7/2, 1998-9/2

EE314 Digital Electronics Laboratory (Electrical and Electronics Eng. Dep., METU)

Semester: 2003-4/2, 2004-5/2, 2005-6/2

EEE347/CENG336 Int. to Microprocessors/Int. to Embedded System Design (Electrical and Electronics Eng. Dep., METU Northern Cyprus Campus)

Semester: 2006-7/2, 2008-9/2, 2011-2/2, 2012-3/2

EE348 Logic Design (Electrical and Electronics Eng. Dep., METU)

Semester: 1996-7/2, 1996-7/3 (summer), 1998-9/2, 1999-00/2, 2000-1/2, 2001-2/2, 2002-3/2, 2003-4/2, 2003-4/3 (summer), 2004-5/2, 2005-6/2, 2006-7/2, 2007-8/2, 2009-10/2, 2010-11/2, 2011-12/2, 2012-13/2, 2013-14/2, 2014-5/2, 2015-16/2,

EE441 Data Structures (Electrical and Electronics Eng. Dep., METU)

Semester: 1999-00/1, 2000-1/1, 2001-2/1, 2005-6/1, 2014-15/1

EE442 Operating Systems (Electrical and Electronics Eng. Dep., METU)

Semester: 2016-17/2, 2017-18/2, 2018-19/2

EE444 Int. to Computer Networks (Electrical and Electronics Eng. Dep., METU)

Semester: 1999-00/2, 2000-1/2, 2001-2/2, 2002-3/2, 2003-4/2, 2004-5/2, 2005-6/2

EE445 Computer Architecture I (Electrical and Electronics Eng. Dep., METU)

Semester: 2017-18/1, 2018-19/1, 2019-20/1

EE446 Computer Architecture II (Electrical and Electronics Eng. Dep., METU)

Semester: 2017-18/2, 2018-19/2

EE447 Int. to Microprocessors (Electrical and Electronics Eng. Dep., METU)
Semester: 1997-8/1, 1999-00/1, 2000-1/1, 2001-2/1, 2002-3/1,
2003-4/1, 2004-5/1, 2006-7/1, 2007-8/1, 2008-9/1,
2009-10/1, 2010-11/1, 2011-12/1, 2011-12/1, 2012-13/1, 2013-14/1

CENG112 Data Structures (Comp. Eng. Dep., IZTECH)
Semester: 2019-20/2

Graduate

EE544 Algorithms and Comput. Complexity (Electrical and Electronics Eng. Dep., METU)
Semester: 2004-5/1, 2005-6/1

EE545 Automata Theory I (Electrical and Electronics Eng. Dep., METU)
Semester: 2007-8/1, 2008-9/1, 2009-10/1, 2010-11/1, 2011-12/1, 2012-13/1,
2013-14/1

EE546 Automata Theory II (Electrical and Electronics Eng. Dep., METU)
Semester: 2007-8/2 2009-10/2, 2010-11/2, 2011-12/2, 2012-13/2, 2013-14/2
2014-15/1, 2015-16/1, 2016-17/1, 2017-18/1, 2018-19/1, 2019-20/1

EE703 Advanced Data Structures and Algorithms (Electrical and Electronics Eng. Dep.,
METU)
Semester: 1997-8/1, 2001-2/2

CENG515 Special Topics in Computer Science (Comp. Eng. Dep., IZTECH)
Semester: 2019-20/2

Laboratory Development and Supervision:

Microcomputer Systems Laboratory: The Department of Electrical and Electronics Engineering, METU, used MC6800-based microcomputer devices and training kits for microprocessor and computer architecture related courses before 2000. Creating appropriate funding, these labs have been modernized equipped with new laptop computers, Motorola (later Freescale) 6811 based training sets and other necessary support equipment in 2001. A completely new set of lecture notes and laboratory manuals have been prepared and the labs are managed and supervised by Dr. Bazlamaççı afterwards.

Starting in 2016, the associated courses and laboratories are modernized, re-organized and enhanced using ARM and FPGA based training sets and the necessary support equipment.

Computer Systems and Networks Research Laboratory: This laboratory was established in Electrical and Electronics Engineering Department in 2002 as a graduate research laboratory. It is equipped with personal computers, work stations, a variety of advanced microcomputer development environments, DSP cards, network simulation software, etc. Many undergraduate and graduate students have participated in research activities of the laboratory under the supervision of Dr. Bazlamaççı.

Conference and Symposium Organization:

Program Committee Member, Processor Design Workshop, 19 September 2019, İstanbul, Turkey

Program Committee Member, Embedded Systems and Applications Symposium (GÖMSİS'14), 4-5 December 2014, İstanbul, Turkey

Program Committee Member, Embedded Systems and Applications Symposium (GÖMSİS'12), 29-30 November 2012, İstanbul, Turkey

Program Committee Member, Electrical Electronics Computer Biomedical Engineering Education 4th Nat. Symp, 22-24 October 2009, Eskişehir, Turkey

Proceedings Editor, Electrical Electronics Computer Engineering Education 1st Nat. Symp., 30 April-2 May 2003, Ankara, Turkey.

Advisory, Program and Organizing Committee Member, Electrical Electronics Computer Engineering Education 1st Nat. Symp., 30 April-2 May 2003, Ankara, Turkey.

Advisory Committee Member, Comm. Technologies 1st Nat. Symp., 17-21 October 2001, Ankara, Turkey.

Refereeing and Jury Memberships:

METU MSc and PhD Thesis Evaluation Committees, **Jury Member**

IV. TÜBİTAK – TTGV – TUSİAD Technology Awards Program, **Jury Member**

TÜBİTAK - BAYG High School Research Projects Competition, **Jury Member**

Marine Forces New Innovations Project Competition, **Jury Member**

MEU Technopolis New Ideas New Business Project Competition, **Jury Member**

Mustafa Parlar Vakfı Science Award, **Jury Member**

TÜBİTAK– TİDEB –TEYDEB Projects, **Referee**

TÜBİTAK– Bilten Projects, **Referee**

METU Technopolis Projects, **Referee**

METU Kosgeb Projeleri, **Referee**

METU Engineering Faculty, School of Science Institute, Informatics Institute, Institute of Applied Mathematics, AFP-BAP Projects, **Referee**

IEEE Transactions on Computers, **Reviewer**

IEEE Transactions on Very Large Scale Integrated Systems, **Reviewer**

IEEE Transactions on Circuits and Systems, **Reviewer**

Computer Networks Journal, Elsevier, **Reviewer**

Computers & Operations Research, Elsevier, **Reviewer**

Journal of Heuristics, **Reviewer**

Elektrik - Turkish Journal of Electrical Engineering & Computer Sciences, **Reviewer**

Elektrik - Turkish Journal of Electrical Engineering & Computer Sciences, **Editorial Board Member**

ARI The Bulletin of the Istanbul Technical University - An Interdisciplinary Journal of Physical and Engineering Science, **Reviewer**

Doğuş University Journal, **Reviewer**

Anadolu University Science and Technology Journal, **Reviewer**

Gazi University Engineering and Architecture Faculty Journal, **Reviewer**

Niğde University Engineering Sciences Journal, **Reviewer**

ISCIS International Symposium on Computer and Information Sciences, **Reviewer**

ISCTurkey International Information Security and Cryptology Conference, **Reviewer**

SAVTEK Defence Technologies Congress, **Reviewer**

ITUS Communications Technologies National Symp., **Reviewer**

ASES Avionics and Systems Integration Symp., **Reviewer**

PDP Euromicro Int. Conf. on Parallel, Distributed and Network-based Processing, **Reviewer**

GÖMSİS Embedded Systems and Applications Symp., **Reviewer**

TUBITAK–TIDEB–TEYDEB Projects, **Supervisor**
METU Technopolis Projects, **Supervisor**
METU Kosgeb Projects, **Supervisor**

TUBITAK Projects, **Review Panel member**
Turkish Republic Ministry of Industry, San-Tez Projects, **Review Panel member**
TUBITAK Embedded Systems, **Call Program Board Member**

PUBLICATIONS

Journal Articles (International) (SCI and SCIE):

Eylen, T. and **Bazlamaççı, C.F.** "One way active delay measurement with error bounds", *IEEE Trans. on Instrumentation and Measurement*, 64/12, 3476-3489 (2015).

Çelik, C. and **Bazlamaççı, C.F.** "Evaluation of energy and buffer aware application mapping for networks-on-chip", *Microprocessors and Microsystems*, 38/4, 325-336, (2014).

Çelik, C. and **Bazlamaççı, C.F.** "Energy and buffer aware application mapping for network-on-chips with self similar traffic", *Journal of Systems Architecture*, 59/10, 1364–1374, (2013).

Erdem, O. and **Bazlamaççı, C.F.** "High performance IP lookup engine with compact clustered trie search", *Computer Journal*, 55/12, 1447-1466, (2012).

Say, F. and **Bazlamaççı, C.F.** "A reconfigurable computing platform for real time embedded applications" *Microprocessors and Microsystems*, 36/1, 13-32, (2012).

Erdem, O. and **Bazlamaççı, C.F.** "Array design for trie-based IP lookup" *IEEE Communications Letters*, 14/8, 773-775, (2010).

Cinel, S. and **Bazlamaççı, C.F.** "A distributed heuristic algorithm for the rectilinear Steiner minimal tree problem", *IEEE Trans. on Computer-Aided Design of Integrated Circuits and Systems*, 27/11, 2083-2087 (2008).

Journal Articles (International) (SCI and SCIE) (related to PhD thesis):

Bazlamaççı, C.F. and Say, F. "Minimum concave cost multicommodity network design", *Telecommunication Systems*, 36/4, 181-203 (2007).

Bazlamaççı, C.F. and Hindi, K.S. "Minimum-weight spanning tree algorithms: A survey and empirical study", *Computers & Operations Research*, 28/8, 767-785 (2001).

Bazlamaççı, C.F. and Hindi, K.S. "Enhanced adjacent extreme point search and Tabu search for the minimum, concave-cost uncapacitated transshipment problem", *Journal of the Operational Research Society*, 47/9, 1150-1165 (1996).

Conference Articles in Proceedings (International) (related to thesis):

Bazlamaççı, C.F. and Hindi, K.S. "An empirical study of minimum-weight spanning tree algorithms, classical and modern," *Proc. of the 14th Int. Symp. on Computer and*

Information Sciences (ISCIS XIV), ed. M. Türksever, et. al., Kuşadası (Turkey), 370-380, Ege University (1999).

Bazlamaççı, C.F. and Hindi, K.S. "Verifying minimum spanning trees in linear time," *Proc. of the Symp. on Operations Research (SOR 1996)*, ed. U. Zimmerman et. al., Braunschweig (Germany), 139-144, Springer-Verlag, Heidelberg (1997).

Bazlamaççı, C.F. and Hindi, K.S. "A tabu search algorithm for concave cost transshipment problems," *Proc. of the 3rd IFIP WG-7.6 Working Conference on Optimization-based Computer-aided Modeling and Design (IFIP 1994)*, ed. J. Dolezal and J. Fidler, Prague (Czech Rep.) 94-101, Academy of Sciences of the Czech Rep. (1994).

Güran, H., and **Bazlamaççı, C.F.** "Performance of parallel FFT on a transputer based mesh architecture," *Proc. of the 7th Int. Symp. on Computer and Information Sciences (ISCIS VII)*, ed. E. Gelenbe, et. al., Antalya (Turkey), 503-506, Universite Rene Descartes (1992).

Conference Articles in Proceedings (National) (related to thesis):

Bazlamaççı, C.F. and K.S. Hindi, "A branch and bound algorithm for the capacitated minimal spanning tree problem using a directed-flow formulation," *Proc. of the 2nd Symp. on Computer Networks (BAS'97)*, ed. S. Bilgen and A. Özgüt, Ankara (Turkey), 31-40, Middle East Technical University (1997).

Ünal, E., **Bazlamaççı, C.F.**, and Güran, H., "Investigation of transputer performance using transform coding of images and FFT methods", *Proc. of the Electrical Electronics and Computer Engineering Conference (BİLKON'91)*, Ankara (Turkey), 270-274, Bilkent University (1991). (in Turkish).

Patents (International):

Bazlamaççı, C.F. and Erdem, O. "Systolic array architecture for fast IP lookup" (triadic patent achieved under METU Technopolis portfolio)

- European Patent No: EP2517420B1, Date of patent: March 19, 2014
- USA Patent No: US 8,724624 B, Date of patent: May 13, 2014
- Japanese Patent No: 5529976, Date of patent: April 25, 2014

Patent (National):

Bazlamaççı, C.F. and Erdem, O. "Hızlı IP arama için sistolik dizilim mimarisi"

- TPE Patent No: TR 2012 09797 B, Date of patent: March 19, 2014

Other Conference Articles in Proceedings (International):

Soltani, A. and **Bazlamaççı, C.F.**, "HyFI: Hybrid flow initiation in software defined networks", *Proc. of the 5th Int. Conf. on Information and Communication Systems (ICICS2014)*, Irbid (Jordan) 1-3 April 2014.

Alizadeh, E.J. and **Bazlamaççı, C.F.** "Life time sensitive weighted clustering on wireless sensor networks", *Proc. of the 3rd Int. Conf. on Sensor Networks (SENSORNETS 2014)*, Lisbon (Portugal), 41-51 (2014).

Yıldırım, S. and **Bazlamaççı, C.F.** "A true random number generator and test platform built in FPGA", *Proc. of the 5th Int. Conf. on Information Security and Cryptology (ISCTurkey 2012)*, Ankara (Turkey), 262-267 (2012).

Çelik, C. and **Bazlamaççı, C.F.** "Effect of application mapping on network-on-chip performance", *Proc. of the 20th Euromicro Int. Conf. on Parallel, Distributed and Network-Based Computing (PDP 2012)*, Munich (Germany), 465-472 (2012).

Uğurel, G. and **Bazlamaççı, C.F.** "Context switching time and memory footprint comparison of Xikernel and μ C/OS-II on MicroBlaze", *Proc. of the 7th Int. Conf. on Electrical and Electronics Engineering (ELECO 2011)*, Bursa (Turkey), v.2, 52-55 (2011).

Erdem, O., Hoang, L., Prasanna, V.K. and **Bazlamaççı, C.F.** "Hybrid data structure for IP lookup in virtual routers using FPGAs", *Proc. of the 22nd IEEE Int. Conf. on Application-specific Systems, Architectures and Processors (ASAP 2011)*, ed. J.R. Cavallaro, et. al., Santa Monica, California (USA) 95-101, IEEE (2011).

Erdem, O. and **Bazlamaççı, C.F.** "MIPS extension for a TCAM based parallel architecture for fast IP lookup", *Proc. of the 24th Int. Symp. on Computer and Information Sciences (ISCIS 2009)*, ed. F.Y. Vural, et. al., Güzelyurt (Northern Cyprus Turkish Republic), 310-315, IEEE (2009).

Bayramoğlu, N.Y. and **Bazlamaççı, C.F.** "Recursive shortest spanning tree algorithms for image segmentation", *Proc. of the IEEE International Conference on "Computer as a Tool" (EUROCON 2005)*, Belgrade (Serbia and Montenegro), 979-982, IEEE Press (2005).

Çelik, C. and **Bazlamaççı, C.F.** "Performance analysis of reliable multicast protocols", *Proc. of the 20th Int. Symp. on Computer and Information Sciences (ISCIS 2005)*, İstanbul (Turkey), *Advances in Computer Science and Engineering: Reports – Vol. 1: New Trends in Computer Networks*, ed. T.Tugcu, et. al., 319-328, Imperial College Press, London, UK (2005).

Öztürk, E.A. and **Bazlamaççı, C.F.** "Fairness in differentiated services architecture", *Proc. 17th Int. Symp. on Computer and Information Sciences (ISCIS XVII)*, ed. I. Çiçekli, et. al., Florida (USA), 264-268, CRC Press (2003).

Önem (Ertem), D. and **Bazlamaççı, C.F.** "Minimum weight directed spanning tree problem with degree, hop and capacity constraints", *Proc. 16th Int. Symp. on Computer and Information Sciences (ISCIS XVI)*, ed. S. Kuru, et. al., Antalya (Turkey), 429-436, Işık University (2001).

Other Conference Articles in Proceedings (National)

Tengilimoğlu, B. and **C.F. Bazlamaççı**, "Partial reconfiguration on a real-time target detection and tracking system", *Proc. of the 22nd Signal Processing and Communications Applications Conf. (SIU 2014)*, Trabzon (Turkey), Karadeniz Technical University, 23-25 April 2014.

Erdem, O. and **C.F. Bazlamaççı**, "SRAM based systolic array architecture for fast IP lookup and matching", *Proc. of the 13th. Nat. Symp. on Electrical, Electronics, Computer and Biomedical Engineering, Ankara (Turkey)*, 173-178, EMO (2009). (in Turkish)

Kahraman, E., T.İpek, B.İyidir, **C.F. Bazlamaççı** and S.Bilgen, "A domain engineering study towards developing a component based product line", *Proc. of the 4th Nat. Symp. on Software Engineering (UYMS'09)*, İstanbul (Turkey), 283-288, EMO (2009). (in Turkish)

Bazlamaççı, C.F. and B. Karadeniz, "Lower bounds for the minimum span frequency assignment problem in cellular networks", *Proc. of the Electrical Electronics and Computer Engineering Symposium (ELECO'02)*, Bursa (Turkey), Electronics Volume: 252-256 TMMOB, Uludağ University, Istanbul Technical University, Tübitak (2002). (in Turkish)

Bazlamaççı, C.F., "Strategic information warfare and national information security", *Proc. of the 8th Electrical Electronics and Computer Engineering Symposium, Gaziantep (Turkey)*, Vol. I, 1-4, Gaziantep University, EMO, Tübitak (1999). (in Turkish)

Other Conference Articles in Proceedings (International) (Abstract only):

Erdem, O., Hoang, L., Prasanna, V.K. and **Bazlamaççı, C.F.** "Hybrid data structure for IP lookup in virtual routers using FPGAs", *19th IEEE Int. Symp. On Field-Programmable Custom Computing Machines (FCCM 2011)* (poster session), Salt Lake City, Utah (USA), Abstract Volume p.253 (2011).

Bazlamaççı, C.F. and Hindi, K.S. "Disaggregate local search for minimum concave-cost multi-commodity network design," *Proc. of the Symp. on Operations Research (SOR 1997)*, Jena (Germany), Abstract Volume p.46 (1997).

Bazlamaççı, C.F. and Hindi, K.S. "A branch and bound algorithm for the capacitated minimal spanning tree problem using a directed formulation," *Proc. of the 16th Int. Symp. on Mathematical Programming (ISMP 1997)*, Lausanne (Switzerland), Abstract Volume p.43 (1997).

Other misc. publications:

Bazlamaççı, C.F. (editor) and Demir, Ş. *Electrical Electronics Computer Engineering Education 1st Nat. Symp. Proceedings*, METU, EMO, Tubitak, Ankara (2003).

Uğurel, G. and **C.F. Bazlamaççı**, "Comparison of real time operating systems on MicroBlaze" *Automation (Otomasyon)*, Vol. 236, 316-322, Bileşim Yayıncılık, (2012). (in Turkish)