# Assoc. Prof. CÜNEYT FEHMİ BAZLAMAÇCI

#### **Personal Information**

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#### **Education Information**

Doctorate, Manchester Institute of Science and Technology, Department Of Computation, United Kingdom 1992 - 1996
Postgraduate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey
1988 - 1991

Undergraduate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1984 - 1988

## Foreign Languages

English, C1 Advanced

#### Dissertations

Doctorate, Optimised network design: minimum spanning trees and minimum concave-cost problems, Manchester Institute Of Science And Technology, Department Of Computation, 1996

Postgraduate, A fast Fourier transform implementation and performance evaluation on a transputer based parallel computer system, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 1991

### **Research Areas**

Communication Networks, algorithms, Information Security and Reliability, Computer Networks, Equipment, Software

# **Academic Titles / Tasks**

Associate Professor, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 2012 - Continues

## **Advising Theses**

BAZLAMAÇCI C. F., Optimizing core signal processing functions on a superscalar SIMD architecture, Postgraduate, Ç.Uslu(Student), 2019

BAZLAMAÇCI C. F., An Application-aware DRAM controller, Postgraduate, R.Cilasın(Student), 2019
BAZLAMAÇCI C. F., Hybrid probabilistic timing analysis with extreme value theory and copulas, Postgraduate,
L.Bekdemir(Student), 2019

BAZLAMAÇCI C. F., Feasibility study for dynamic context switching inpartially reconfigurable FPGAS, Postgraduate, E.Yılmaz(Student), 2019

BAZLAMAÇCI C. F., Design and implementation of power quality monitoring system for distribution systems,

Postgraduate, N.Arzu(Student), 2019

BAZLAMAÇCI C. F., NFA based regular expression matching on FPGA, Postgraduate, K.SERT(Student), 2018

BAZLAMAÇCI C. F., Data plane-based defense system against ddos attacks for software defined networks, Postgraduate, A.GÖZÜTOK(Student), 2018

BAZLAMAÇCI C. F., Tool support for worst case end to end delay analysis of AFDX networks, Postgraduate, O.EFE(Student), 2016

BAZLAMAÇCI C. F., One way active delay measurement with error bounds, Postgraduate, T.EYLEN(Student), 2015

BAZLAMAÇCI C. F., GF (2M) multiplier implementation on a partially reconfigurable FPGA, Postgraduate,

G.KOCALAR(Student), 2015

BAZLAMAÇCI C. F., GPU accelerated rectilinear steiner tree construction, Postgraduate, D.ÖZCAN(Student), 2015

BAZLAMAÇCI C. F., OpenCL implementation of montgomery multiplication on FPGA /, Postgraduate, M.UFUK(Student), 2014

BAZLAMAÇCI C. F., A dynamic memory manager for FPGA applications, Postgraduate, C.ÖZER(Student), 2014

BAZLAMAÇCI C. F., A joint resource allocation system for cloud computing, Postgraduate, H.SEÇKİN(Student), 2014

BAZLAMAÇCI C. F., Partially reconfigurable FPGA implementation of a real-time system /, Postgraduate,

B.TENGİLİMOĞLU(Student), 2014

BAZLAMAÇCI C. F., Trie-tree data structure for IP lookup in virtual routers, Postgraduate, D.BAYSAL(Student), 2014

BAZLAMAÇCI C. F., Flow initiation in software defined networking, Postgraduate, A.SOLTANI(Student), 2014

BAZLAMAÇCI C. F., A Dynamic memory manager for FPGA applications/, Postgraduate, C.Özer(Student), 2014

BAZLAMAÇCI C. F., A Joint resource allocation system for cloud computing /, Postgraduate, H.Seçkin(Student), 2014

BAZLAMAÇCI C. F., Life time sensitive weighted clustering on wireless sensor networks, Postgraduate,

E.ALIZADEH(Student), 2013

BAZLAMAÇCI C. F., Energy and buffer aware application mapping for networks on chip, Doctorate, C.ÇELİK(Student), 2013

BAZLAMAÇCI C. F., Memory organization in pipelined hierarchical search structures for packet classification,

Postgraduate, Ç.IRMAK(Student), 2013

BAZLAMAÇCI C. F., A True random generator in FPGA for cryptographic applications, Postgraduate, S.Yıldırım(Student), 2012

BAZLAMAÇCI C. F., A true random number generator in FPGA for cryptographic applications, Postgraduate,

S.YILDIRIM(Student), 2012

BAZLAMAÇCI C. F., Benchmarking of Xilkernel, freertos and  $\mu$ C/OS-II on the soft processor platform microblaze,

Postgraduate, G.UĞUREL(Student), 2012

BAZLAMAÇCI C. F., Prototype development and verification for an IP lookup engine on FPGAs performance study,

Postgraduate, A.ÖZKANER(Student), 2012

BAZLAMAÇCI C. F., FPGA implementation of a network-on-chip, Postgraduate, İ.ÖZSEL(Student), 2011

BAZLAMAÇCI C. F., Parallel and pipelined architectures for high speed ip packet forwarding, Doctorate,

O.ERDEM(Student), 2011

BAZLAMAÇCI C. F., A reconfigurable computing platform for real time embedded applications, Doctorate,

F.SAY(Student), 2011

BAZLAMAÇCI C. F., Evaluation of core stateless guaranteed fair network architecture, Postgraduate, M.İLHAN(Student), 2006

BAZLAMAÇCI C. F., Sequential and parallel heuristic algorithms for the rectilinear Steiner tree problem, Postgraduate, S.CİNEL(Student), 2006

BAZLAMAÇCI C. F., Minimum concave cost multicommodity network design, Postgraduate, F.SAY(Student), 2005

BAZLAMAÇCI C. F., On QoS multicast routing protocols, Postgraduate, A.BEREKETLİ(Student), 2005

BAZLAMAÇCI C. F., Recursive shortest spaning tree algorithms for image segmentation, Postgraduate, N.Yalçın(Student), 2005

BAZLAMAÇCI C. F., Recursive shortest spanning tree algorithms for image segmentation, Postgraduate,

N.YALÇIN(Student), 2005

BAZLAMAÇCI C. F., Performance analysis of reliable multicast protocols, Postgraduate, C.ÇELİK(Student), 2004

BAZLAMAÇCI C. F., Lifetime analysis for wireless sensor networks, Postgraduate, B.ÖĞÜNLÜ(Student), 2004

BAZLAMAÇCI C. F., Internet multicast congestion control, Postgraduate, K.ÖNAL(Student), 2004

BAZLAMAÇCI C. F., Reroute sequence planning in multiprotocol label switching networks, Postgraduate,

İ.GÖKHAN(Student), 2004

BAZLAMAÇCI C. F., A SoHo router implementation on Motorola MCF5272 processor and uClinux system, Postgraduate, M.Nazir(Student), 2003

BAZLAMAÇCI C. F., A SoHo router implementation on Motorola MCF5272 processor and uCLinux operating system, Postgraduate, M.NAZİR(Student), 2003

BAZLAMAÇCI C. F., University course scheduling using a genetic algorithm., Postgraduate, A.TURAN(Student), 2002

BAZLAMAÇCI C. F., Minimum weight directed spanning tree problem with degree, hop and capacity constraints,

Postgraduate, D.ERTEM(Student), 2001

BAZLAMAÇCI C. F., Traveling salesman problem: Solution with branch and data correction algorithms, Postgraduate, H.YILMAZ(Student), 2001

BAZLAMAÇCI C. F., Lower bounds for the minumum span frequency assignment problem in cellular networks, Postgraduate, B.KARADENİZ(Student), 2001

## Published journal articles indexed by SCI, SSCI, and AHCI

I. One-Way Active Delay Measurement With Error Bounds

Eylen T., BAZLAMAÇCI C. F.

IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, vol.64, no.12, pp.3476-3489, 2015 (SCI-Expanded)

II. Evaluation of energy and buffer aware application mapping for networks-on-chip Celik C., BAZLAMAÇCI C. F.

MICROPROCESSORS AND MICROSYSTEMS, vol.38, no.4, pp.325-336, 2014 (SCI-Expanded)

III. Energy and buffer aware application mapping for networks-on-chip with self similar traffic Celik C., BAZLAMAÇCI C. F.

JOURNAL OF SYSTEMS ARCHITECTURE, vol.59, no.10, pp.1364-1374, 2013 (SCI-Expanded)

IV. High-performance IP Lookup Engine with Compact Clustered Trie Search

Erdem O., BAZLAMAÇCI C. F.

COMPUTER JOURNAL, vol.55, no.12, pp.1447-1466, 2012 (SCI-Expanded)

V. A reconfigurable computing platform for real time embedded applications

Say F., BAZLAMAÇCI C. F.

MICROPROCESSORS AND MICROSYSTEMS, vol.36, no.1, pp.13-32, 2012 (SCI-Expanded)

VI. Array Design for Trie-based IP Lookup

Erdem O., BAZLAMAÇCI C. F.

IEEE COMMUNICATIONS LETTERS, vol.14, no.8, pp.773-775, 2010 (SCI-Expanded)

VII. A Distributed Heuristic Algorithm for the Rectilinear Steiner Minimal Tree Problem

Cinel S., BAZLAMAÇCI C. F.

IEEE TRANSACTIONS ON COMPUTER-AIDED DESIGN OF INTEGRATED CIRCUITS AND SYSTEMS, vol.27, no.11, pp.2083-2087, 2008 (SCI-Expanded)

VIII. Minimum concave cost multicommodity network design

BAZLAMAÇCI C. F., Say F.

TELECOMMUNICATION SYSTEMS, vol.36, no.4, pp.181-203, 2007 (SCI-Expanded)

IX. Minimum-weight spanning tree algorithms - A survey and empirical study

Bazlamacci C., Hindi K.

COMPUTERS & OPERATIONS RESEARCH, vol.28, no.8, pp.767-785, 2001 (SCI-Expanded)

X. Enhanced adjacent extreme-point search and tabu search for the minimum concave-cost

#### uncapacitated transshipment problem

Bazlamacci C. F., Hindi K.

JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY, vol.47, no.9, pp.1150-1165, 1996 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

#### I. PARTIAL RECONFIGURATION ON A REAL-TIME TARGET DETECTION AND TRACKING SYSTEM

Tengilimoglu B., BAZLAMAÇCI C. F.

22nd IEEE Signal Processing and Communications Applications Conference (SIU), Trabzon, Turkey, 23 - 25 April 2014, pp.1130-1133

### II. HyFI: Hybrid Flow Initiation in Software Defined Networks

Soltani A., BAZLAMAÇCI C. F.

5th International Conference on Information and Communication Systems (ICICS), Irbid, Jordan, 1 - 03 April 2014

#### III. Hybrid Data Structure for IP Lookup in Virtual Routers Using FPGAs

Erdem O., Le H., Prasanna V. K., BAZLAMAÇCI C. F.

22nd IEEE International Conference on Application-Specific Systems, Architectures and Processors (ASAP), California, United States Of America, 11 - 14 September 2011, pp.95-102

### IV. MIPS Extension for a TCAM Based Parallel Architecture for Fast IP Lookup

Erdem O., BAZLAMACCI C. F.

24th International Symposium on Computer and Information Sciences, Güzelyurt, Cyprus (Kktc), 14 - 16 September 2009, pp.309-314

### V. Recursive shortest spanning tree algorithms for image segmentation

Bayramoglu N., Bazlamacci C.

International Conference on Computer as a Tool (EUROCON 2005), Belgrade, Serbia And Montenegro, 21 - 24 November 2005, pp.979-982

### **Supported Projects**

BAZLAMAÇCI C. F., Project Supported by Higher Education Institutions, İndirgenemez Üç Terimli Polinom Tabanlı Sonlu Cisim Gf (2m) İçin Boru Hattı Temelli Böl-Fethet Çarpıcı Tasarımı Ve Gerçeklemesi., 2010 - 2010

### **Patent**

BAZLAMAÇCI C. F., HIZLI IP ARAMA İÇİN SİSTOLİK DİZİLİM MİMARİSİ, Patent, CHAPTER B Implementation of Operations; Transport, Standard Registration, 2015

### **Metrics**

Publication: 15 Citation (WoS): 103 Citation (Scopus): 49 H-Index (WoS): 6 H-Index (Scopus): 6