

Asst. Prof. BETÜL BOZ

Personal Information

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Biography

Betül BOZ lisans ve yüksek lisans derecelerini Marmara Üniversitesi Mühendislik Fakültesi Bilgisayar Mühendisliği Bölümü'nden, doktora derecesini Boğaziçi Üniversitesi Bilgisayar Mühendisliğinden aldı. 2013 yılında Marmara Üniversitesi Mühendislik Fakültesi Bilgisayar Mühendisliği Bölümü'nde Dr. Öğretim Üyesi olarak çalışmaya başlamıştır. Başlıca araştırma alanları arasında bilgisayar mimarisi, paralel algoritmalar, optimizasyon, yapay zeka, ve algoritma tasarımı yer almaktadır.

Education Information

Doctorate, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (Dr), Turkey 2004 - 2011

Post Graduate, Marmara University, Faculty of Engineering, Computer Engineering, Turkey 2002 - 2004

Under Graduate, Marmara University, Faculty of Engineering, Computer Engineering, Turkey 1998 - 2002

Foreign Languages

English, C2 Proficiency

Dissertations

Doctorate, Application mapping and optimization for CMP based architectures, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (Dr), 2011

Post Graduate, Hybrid evolutionary algorithms for solving the register allocation problem, Marmara University, Faculty of Engineering, Bilgisayar Mühendisliği Bölümü, 2004

Research Areas

algorithms, Processor Architectures, Evolutionary Computing

Academic Titles / Tasks

Assistant Professor, Marmara University, Faculty of Engineering, Computer Engineering, 2012 - Continues

Research Assistant, Marmara University, Faculty of Engineering, Computer Engineering, 2002 - 2012

Professional Experience

Head of Department, Marmara University, Faculty of Engineering, Computer Engineering, 2014 - Continues
Deputy Head of Department, Marmara University, Faculty of Engineering, Computer Engineering, 2014 - Continues

Courses

Introduction to Computational Genomics, Under Graduate, 2020 - 2021
Compiler Design, Under Graduate, 2020 - 2021
Embedded Systems, Post Graduate, 2020 - 2021
Digital Logic Design, Under Graduate, 2019 - 2020
Computer Programming I, Under Graduate, 2019 - 2020

Advising Theses

Boz B., Solving graph coloring problem by using an evolutionary algorithm, Post Graduate, S.KORKMAZ(Student), 2020
Boz B., Solving bin packing problem with problem specific operators using an evolutionary algorithm, Post Graduate, T.Zeynep(Student), 2019
BOZ B., Solving dynamic graph coloring problem by using a heuristic algorithm, Post Graduate, G.SÜNGÜ(Student), 2018
BOZ B., Improving efficiency of the solutions for class imbalance problems using data mining techniques, Post Graduate, I.FAKHRUZI(Student), 2018

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Integrated Crossover Based Evolutionary Algorithm for Coloring Vertex-Weighted Graphs**
BOZ B., Sungu G.
IEEE ACCESS, vol.8, pp.126743-126759, 2020 (Journal Indexed in SCI)
- II. **Particle simulation on the Cell BE architecture**
Demiroz B., TOPCUOĞLU H. R. , Kandemir M., Tosun O.
CLUSTER COMPUTING-THE JOURNAL OF NETWORKS SOFTWARE TOOLS AND APPLICATIONS, vol.14, no.4, pp.419-432, 2011 (Journal Indexed in SCI)
- III. **Solving the register allocation problem for embedded systems using a hybrid evolutionary algorithm**
Topcuoglu H. R. , Demiroz B., Kandemir M.
IEEE TRANSACTIONS ON EVOLUTIONARY COMPUTATION, vol.11, no.5, pp.620-634, 2007 (Journal Indexed in SCI)
- IV. **Static Task Scheduling with a Unified Objective on Time and Resource Domains**
BOZ B., TOPCUOĞLU H. R.
Computer Journal, vol.49, pp.731-743, 2006 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **Solving Dynamic Graph Coloring Problem Using Dynamic Pool Based Evolutionary Algorithm**
Sungu G., BOZ B.
20th European Conference on the Applications of Evolutionary Computation (EvoApplications), Amsterdam, Netherlands, 19 - 21 April 2017, vol.10200, pp.189-204
- II. **An Evolutionary Algorithm for Weighted Graph Coloring Problem**
BOZ B., SÜNGÜ G.
Proceedings of the Companion Publication of the 2015 on Genetic and Evolutionary Computation Conference - GECCO Companion 'xx15, Madrid, Spain, 11 - 15 July 2015, pp.1233-1236
- III. **Locality-Aware Dynamic Mapping for Multithreaded Applications**
BOZ B., TOPCUOĞLU H. R. , KANDEMİR M., Tosun O.

2012 20th Euromicro International Conference on Parallel, Distributed and Network-based Processing, Munich, Germany, 15 - 17 February 2012, pp.185-189

IV. A hybrid evolutionary algorithm for solving the register allocation problem

BOZ B., TOPCUOĞLU H. R. , KANDEMİR M.

Evolutionary Computation in Combinatorial Optimization, Portugal, 5 - 07 April 2004, pp.62-71

V. Signal compression using growing cell structures: A transformational approach

BOZ B., TÜMER M. B.

Computer and Information Sciences - ISCIS 2003, Antalya, Turkey, 3 - 05 November 2003, vol.952

Edit Congress and Symposium Activities

İşlemci Tasarımı Çalıştayı, Working Group, İstanbul, Turkey, 2019

Citations

Total Citations (WOS):25

h-index (WOS):2