Assoc. Prof. KAYHAN MUSTAFA İMRE

Personal Information

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Education Information

Doctorate, University of Edinburgh, Faculty Of Science And Engineering, United Kingdom 1988 - 1994
Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Bilgisayar Bilimleri Mühendisliği (Yl) (Tezli), Turkey 1985 - 1987
Undergraduate, Hacettepe University, Mühendislik Fakültesi, Bilgisayar Bilimleri Mühendisliği Bölümü, Turkey 1980 - 1985

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, A Performance monitoring and analysis environment for distributed memory MIMD programs, University Of Edinburgh, Faculty Of Science And Engineering, 1993
Postgraduate, Mikrobilgisayarlar için çok görevli gerçek zamanlı bir işletim yazılımının tasarımı ve gerçekleştirimi, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Bilimleri Mühendisliği (Yl) (Tezli), 1987

Academic and Administrative Experience

Hacettepe Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2010 - 2012
Hacettepe Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2004 - 2006
Hacettepe Üniversitesi, Bilişim Enstitüsü, Bilişim Sistemleri Anabilim Dalı, 2004 - 2006
Hacettepe Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 1994 - 1996

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Network accelerator for parallel discrete event simulations**
Karaca O. V., İMRE K. M., ALKAR A. Z.
Journal of Supercomputing, vol.79, no.16, pp.18728-18747, 2023 (SCI-Expanded)

II. **Predetermined Rollbacks: An extension to Time Warp for spatially parallel agent-based simulation**
Gorur B. K., İMRE K. M., OĞUZTÜZÜN M. H. S., Yilmaz L.
SIMULATION MODELLING PRACTICE AND THEORY, vol.95, pp.60-77, 2019 (SCI-Expanded)

III. **Scheduling computation and communication on a software-defined photonic Network-on-Chip architecture for high-performance real-time systems**
TEMUÇİN H., İMRE K. M.

JOURNAL OF SYSTEMS ARCHITECTURE, vol.90, pp.54-71, 2018 (SCI-Expanded)

IV. **Systematic approach for deriving feasible mappings of parallel algorithms to parallel computing platforms**

Arkin E., Tekinerdogan B., İMRE K. M.

CONCURRENCY AND COMPUTATION-PRACTICE & EXPERIENCE, vol.29, no.1, 2017 (SCI-Expanded)

V. **Dual-mode routing approach for photonic network on chip platforms**

İMRE K. M.

JOURNAL OF SUPERCOMPUTING, vol.72, no.3, pp.904-925, 2016 (SCI-Expanded)

VI. **Deriving Feasible Deployment Alternatives for Parallel and Distributed Simulation Systems**

Celik T., TEKİNERDOĞAN B., İMRE K. M.

ACM TRANSACTIONS ON MODELING AND COMPUTER SIMULATION, vol.23, no.3, 2013 (SCI-Expanded)

VII. **A parallel implementation of Strassen's matrix multiplication algorithm for wormhole-routed all-port 2D torus networks**

Baransel C., İMRE K. M.

JOURNAL OF SUPERCOMPUTING, vol.62, no.1, pp.486-509, 2012 (SCI-Expanded)

VIII. **Efficient and Scalable Routing Algorithms for Collective Communication Operations on 2D All-Port Torus Networks**

İMRE K. M., Baransel C., ARTUNER H.

INTERNATIONAL JOURNAL OF PARALLEL PROGRAMMING, vol.39, no.6, pp.746-782, 2011 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

I. **SIMULATING THE PROGRAMMABLE NETWORKS FOR HLA COMPATIBLE HIGH-PERFORMANCE SIMULATORS**

İMRE K. M.

36th International ECMS Conference on Modelling and Simulation, ECMS 2022, Alesund, Norway, 30 May - 03 June 2022, vol.2022-May, pp.291-295

II. **A photonic-based sensor data distribution approach for a real-time multi-processor system**

TEMUÇİN H., İMRE K. M.

25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

III. **Model-Driven Approach for Supporting the Mapping of Parallel Algorithms to Parallel Computing Platforms**

Arkin E., Tekinerdogan B., İMRE K. M.

ACM/IEEE 16th International Conference on Model-Driven Engineering Languages and Systems (MODELS), Florida, United States Of America, 29 September - 04 October 2013, vol.8107, pp.757-773

Supported Projects

İMRE K. M., TUBITAK Project, Kriptolanmış Verilere Yüksek Performanslı Erişim Sistemi KVYPES, 2014 - 2015

Metrics

Publication: 11
Citation (WoS): 32
H-Index (WoS): 4

Non Academic Experience

Meteksan Sistem (Mobilsoft) A.Ş.
STM Savunma Teknolojileri ve Mühendislik Tic. A.Ş.
STM Savunma Teknolojileri ve Mühendislik Tic. A.Ş.
STM Savunma Teknolojileri ve Mühendislik Tic. A.Ş.