

Prof. MUSTAFA GÖK



Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: J-2159-2018

ScopusID: 23389118100

Yoksis Researcher ID: 130422

Education Information

Doctorate, Lehigh University, P.C. Rossin College Of Engineering, Electrical Engineering, United States Of America 2000 - 2003

Postgraduate, Lehigh University, P.C. Rossin College Of Engineering, Electrical Engineering, United States Of America 1998 - 2000

Undergraduate, Istanbul University, Mühendislik Mimarlık Fakültesi, Elektronik Mühendisliği, Turkey 1990 - 1995

Foreign Languages

English, C1 Advanced

Research Areas

Computer Sciences, Information Security and Reliability, Cryptography, Equipment, Logic Design, Microprogramming and Control Structure, Integrated Circuits, Application Based Architecture, Artificial Intelligence, Computer Learning and Pattern Recognition, Evolutionary Computing, Engineering and Technology

Academic Titles / Tasks

Professor, Cukurova University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2014 - Continues

Associate Professor, Cukurova University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2009 - 2014

Assistant Professor, Cukurova University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2003 - 2008

Academic and Administrative Experience

Head of Department, Cukurova University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2021 - Continues

Head of Department, Cukurova University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2007 - Continues
Vice Rector, Adana Alparslan Türkeş Science And Technology University, 2016 - 2016
Cukurova University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği, 2009 - 2012
Cukurova University, Mühendislik-Mimarlık Fakültesi, 2004 - 2007

Courses

High Speed Computer Arithmetic , Doctorate, 2023 - 2024
Special Topics on Embedded Systems Development, Doctorate, 2023 - 2024
Application Specific Processors , Postgraduate, 2023 - 2024
Introduction to Embedded Systems Design, Undergraduate, 2022 - 2023
Numerical Methods, Undergraduate, 2022 - 2023
Special Topics on System on Chip Design, Doctorate, 2023 - 2024
Digital System Design on FPGAs , Postgraduate, 2023 - 2024
Embedded Systems Design, Undergraduate, 2021 - 2022
Logic Circuits, Undergraduate, 2019 - 2020

Advising Theses

Gök M., Convolutional neural network design with new max pooling circuits, Postgraduate, B.BÜLBÜL(Student), 2022
Gök M., A multimodal public transit network design method based on hub-and-spoke infrastructure, Doctorate, Z.BOUTARFA(Student), 2022
Gök M., Weed detection and classification using deep learning, Postgraduate, M.NAJMUL(Student), 2021
Gök M., Incident Level Crime Analysis Methods and Tool, Doctorate, M.Sait(Student), 2018
Gök M., HARDWARE ACCELERATORS FOR PUBLIC KEY CRYPTOGRAPHY, Doctorate, A.Şentürk(Student), 2014
Gök M., Demand Based Single and Multi Objective Route Planning Algorithms, Doctorate, F.Kılıç(Student), 2014
GÖK M., INDOOR INTELLIGENT VIDEO SURVEILLANCE SYSTEM APPLICATION, Postgraduate, E.Turan(Student), 2014
GÖK M., DESIGN AND SIMULATION OF SOFT DECISION VETERBI DECODER, Postgraduate, İ.Can(Student), 2011
GÖK M., A PUBLIC TRANSPORTATION ROUTE PLANNING TOOL: ToTRoP, Postgraduate, F.Kılıç(Student), 2010
GÖK M., FLOATING-POINT HARDWARE DESIGNS FOR MULTIMEDIA PROCESSING, Doctorate, M.Mete(Student), 2009
GÖK M., REDUCED INSTRUCTION SET PROCESSOR DESIGN, Postgraduate, A.Şentürk(Student), 2009
GÖK M., SYSTOLIC ARCHITECTURES FOR SEQUENCE ALIGNMENT OPERATIONS, Postgraduate, Ç.Yılmaz(Student), 2008

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Using graph neural networks to reconstruct charged pion showers in the CMS High Granularity Calorimeter**
Aamir M., Adamov G., Adams T., Adloff C., Afanasiev S., Agrawal C., Agrawal C., Ahmad A., Ahmed H., Akbar S., et al.
Journal of Instrumentation, vol.19, no.11, 2024 (SCI-Expanded)
- II. **Multimodal Public Transit Network Design Method Based on Hub-and-Spoke Infrastructure**
Boutarfa Z., Gök M.
TRANSPORTATION RESEARCH RECORD, vol.0, no.0, 2023 (SCI-Expanded)
- III. **Criminal prediction using Naive Bayes theory**
Vural M. S., GÖK M.
NEURAL COMPUTING & APPLICATIONS, vol.28, no.9, pp.2581-2592, 2017 (SCI-Expanded)
- IV. **Single and multiple precision sequential large multipliers for field-programmable gate arrays**
ŞENTÜRK A., GÖK M.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.24, no.4, pp.2961-2973, 2016

(SCI-Expanded)

- V. **Sequential Large Multipliers on FPGAs**
Şentürk A., Gök M.
JOURNAL OF SIGNAL PROCESSING SYSTEMS FOR SIGNAL IMAGE AND VIDEO TECHNOLOGY, vol.81, pp.137-152, 2015 (SCI-Expanded)
- VI. **A demand based route generation algorithm for public transit network design**
Kılıç F., GÖK M.
COMPUTERS & OPERATIONS RESEARCH, vol.51, pp.21-29, 2014 (SCI-Expanded)
- VII. **System designs to perform bioinformatics sequence alignment**
Yılmaz C., GÖK M.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.21, no.1, pp.246-262, 2013 (SCI-Expanded)
- VIII. **Integer squarers with overflow detection**
Gok M.
COMPUTERS & ELECTRICAL ENGINEERING, vol.34, no.5, pp.378-391, 2008 (SCI-Expanded)
- IX. **Enhanced-functionality multipliers**
Gök M.
JOURNAL OF SYSTEMS ARCHITECTURE, vol.54, pp.742-756, 2008 (SCI-Expanded)
- X. **Multi-functional floating-point MAF designs with dot product support**
GÖK M., Ozbilen M. M.
MICROELECTRONICS JOURNAL, vol.39, no.1, pp.30-43, 2008 (SCI-Expanded)
- XI. **A novel IEEE rounding algorithm for high-speed floating-point multipliers**
Gok M.
INTEGRATION-THE VLSI JOURNAL, vol.40, no.4, pp.549-560, 2007 (SCI-Expanded)
- XII. **Integer multipliers with overflow detection**
Gok M., Schulte M. J., Arnold M. G.
IEEE TRANSACTIONS ON COMPUTERS, vol.55, no.8, pp.1062-1066, 2006 (SCI-Expanded)

Articles Published in Other Journals

- I. **Analysis of Incident-Level Crime Data Using Clustering with Hybrid Metrics**
GÖK M., Yetgin Z., Vural M. S.
GAU Journal of Applied & Social Sciences, vol.6, no.10, pp.8-20, 2014 (Peer-Reviewed Journal)
- II. **FPGA'lar için Ardışık Büyük Tam Sayı Kare Alıcılar**
ŞENTÜRK A., GÖK M.
ÇUKUROVA ÜNİVERSİTESİ MÜHENDİSLİK MİMARLIK FAKÜLTESİ DERGİSİ, vol.29, no.1, pp.157-163, 2014 (Peer-Reviewed Journal)
- III. **A SINGLE DOUBLE PRECISION FLOATING POINT MULTIPLIER DESIGN FOR MULTIMEDIA APPLICATIONS**
Özbilen M., GÖK M.
ISTANBUL UNIVERSITY-JOURNAL OF ELECTRICAL AND ELECTRONICS ENGINEERING, vol.9, no.1, 2009 (ESCI)

Books & Book Chapters

- I. **Introduction to Programming with C**
Gök M.
Akademisyen Yayınevi Kitabevi, Adana, 2022

Refereed Congress / Symposium Publications in Proceedings

- I. **Maksimum Ortaklama Devre Tasarımları**
Bülbül B., GÖK M.
İşlemci Tasarım Çalıştayı, İstanbul, Turkey, 19 September 2019
- II. **Solving The Traveling Salesman Problem Using Parallelized Artificial Bee Colony Algorithm**
Asil F., GÖK M.
International Conference on Advanced Technologies, Computer Engineering and Science (ICATCES'18), 11 - 13 May 2018
- III. **Evaluation of a public bus transportation network**
BOUTARFA Z., KILIÇ F., GÖK M.
International Symposium on Industry 4.0 and Applications, 12 - 14 October 2017, pp.166-170
- IV. **Toplu taşıma ağı tasarımı problemi için geliştirilmiş başlangıç rota üretim algoritması ve yeni bir mutasyon genetik operatörü**
KILIÇ F., GÖK M.
1st International Mediterranean SCIENCE AND ENGINEERING CONGRESS, 26 - 28 October 2016
- V. **A Benchmark Proposal for Route-Planning of Urban Bus Service**
Kilic F., GÖK M.
Eastern European Regional Conference on the Engineering of Computer-Based Systems ECBS-EERC, Brno, Czech Republic, 27 - 28 August 2015, pp.134-137
- VI. **A Public Transit Network Route Generation Algorithm**
KILIÇ F., GÖK M.
1st IFAC Workshop on Advances in Control and Automation Theory for Transportation Applications, 31 December 2013, vol.46, pp.162-166
- VII. **Pipelined Large Multiplier Designs on FPGAs**
ŞENTÜRK A., GÖK M.
2012 15th Euromicro Conference on Digital System Design, Cesme, Izmir, Turkey, 5 - 08 September 2012
- VIII. **A Fast Modular Multiplication Method**
ŞENTÜRK A., GÖK M.
2010 Sixth International Conference on Intelligent Information Hiding and Multimedia Signal Processing, Darmstadt, Germany, 15 - 17 October 2010
- IX. **ToTRoP:Web Based Public Transportation Routing Tool**
Kılıç F., GÖK M.
International Symposium on Intelligent Manufacturing Systems, Sarajevo, Bosnia And Herzegovina, 15 September - 17 October 2010, pp.500-509
- X. **A Proposal for Modular Multiplication**
ŞENTÜRK A., GÖK M.
4th International Information, Security and Cryptography Conference, Ankara, Turkey, 05 May 2010, pp.403-405
- XI. **A single/double precision floating-point reciprocal unit design for multimedia applications**
Özbilen M., Gök M.
International Conference on Electrical and Electronics Engineering, 2009. ELECO 2009., Bursa, Turkey, 5 - 08 November 2009, pp.352-356
- XII. **An Optimized System for Multiple Sequence Alignment**
Yilmaz C., GÖK M.
International Conference on Reconfigurable Computing and FPGAs, Cancun, Mexico, 9 - 11 December 2009, pp.178-180
- XIII. **32-Bit İndirgenmiş Komut Setli İşlemci Tasarımı**
ŞENTÜRK A., Gök M.
Çukurova Üniversitesi Mühendislik Mimarlık Fakültesi 30. Yıl Sempozyumu, Adana, Turkey, 16 - 17 October 2008, pp.1-5
- XIV. **A multi-precision floating-point adder**

Ozbilen M. M., GÖK M.

Conference on PhD Research in Microelectronics and Electronics, İstanbul, Turkey, 22 - 25 June 2008, pp.117-120

XV. Hardware designs for local alignment of protein sequences

GÖK M., Yilmaz C.

21st International Symposium on Computer and Information Sciences (ISCIS 2006), İstanbul, Turkey, 1 - 03 November 2006, vol.4263, pp.277-278

XVI. Efficient cell designs for systolic Smith-Waterman implementations

GÖK M., Yilmaz C.

16th International Conference on Field Programmable Logic and Applications, Madrid, Spain, 28 - 30 August 2006, pp.889-892

XVII. Designs for subword parallel multiplications and dot product operations WASP Vol 4 2004

GÖK M., Schulte M. J., Krithivasan S.

Workshop on Applications Specific Processors, Stockholm, Sweden, 9 - 12 September 2004

XVIII. Designs for subword-parallel multiplications and dot product operations.

GÖK M., Schulte M. J., Krithivasan S.

Third Workshop on Application Specific Processors, WASP'04, Stockholm, Sweden, 7 - 08 September 2004, pp.27-31

XIX. Efficient integer multiplication overflow detection circuits

GÖK M., Schulte M. J., Balzola P.

Conference Record of Thirty-Fifth Asilomar Conference on Signals, Systems and Computers (Cat.No.01CH37256), Pacific Grove, CA, USA, 4 - 07 November 2001

XX. Combined unsigned and two's complement saturating multipliers

Schulte M. J., GÖK M., Balzola P., Bracato R. W.

SPIE 4116, Advanced Signal Processing Algorithms, Architectures, and Implementations, San Diego, CA, 13 November 2000

Supported Projects

GÖK M., Bülbül B., Project Supported by Higher Education Institutions, Human Presence Detection with Convolutional Neural Network, 2020 - 2022

GÖK M., Project Supported by Higher Education Institutions, BiyoEsinli Algoritma Tasarımı İşlemleri İçin Bilgisayar Desteği, 2015 - 2019

GÖK M., Kılıç F., Project Supported by Higher Education Institutions, Toplu Taşıma Hatları için Talep Tabanlı Rota Üretimi ve Adana'ya uygulaması, 2014 - 2016

Gök M., TUBITAK Project, System Design for Bioinformatics Sequence Alignment Operations, 2006 - 2009

Memberships / Tasks in Scientific Organizations

Scientific and Technological Research Council of Türkiye, Embedded Systems Projects Advisory Board Member, Member of Advisory Board, 2015 - 2018, Turkey