

# Prof. GÖKTÜRK ÜÇOLUK

## Personal Information

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## Education Information

Doctorate, Middle East Technical University, Fen Edebiyat, Fizik, Turkey 1982 - 1989

Postgraduate, Boğaziçi Üniversitesi, Temel Bilimler Fakültesi, Fizik, Turkey 1980 - 1982

Undergraduate, Boğaziçi Üniversitesi, Temel Bilimler Fakültesi, Fizik, Turkey 1976 - 1980

## Foreign Languages

English, C1 Advanced

German, C1 Advanced

## Dissertations

Doctorate, An Exterior calculus package for REDUCE and dimensional reduction of generalised theories of gravity, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 1989

## Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 2008 - Continues

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 1997 - 2008

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 1990 - 1997

Research Assistant, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 1982 - 1990

## Advising Theses

ÜÇOLUK G., Zero shot dialogue act classification, Postgraduate, Uğur(Student), 2019

ÜÇOLUK G., TOROSLU İ. H., RnR: Reduce and Raise - Bottom-Up Community Detection in Bipartite and Tripartite Graphs, Postgraduate, KEKMEKÇİ(Student), 2019

ÜÇOLUK G., An Aerostructural 3D wing optimization using parallel genetic algorithms, Postgraduate, A.Arpaç(Student), 2019

ÜÇOLUK G., Vision-based detection and distance estimation of micro unmanned aerial vehicles, Doctorate, F.GÖKÇE(Student), 2015

ÜÇOLUK G., Ontology based text mining in Turkish radiology reports, Postgraduate, O.DENİZ(Student), 2012

ÜÇOLUK G., Processing Turkish radiology reports, Postgraduate, K.HADIMLI(Student), 2011

ÜÇOLUK G., ŞEHİTOĞLU O. T. , Improving search result clustering by integrating semantic information from Wikipedia, Postgraduate, Ç.Çallı(Student), 2010

ÜÇOLUK G., TOROSLU İ. H. , A comparative study of tree encodings for evolutionary computing, Postgraduate, E.SAKA(Student), 2005

ÜÇOLUK G., ŞEHİTOĞLU O. T. , A comparative study of evolutionary network design, Postgraduate, S.Kalkan(Student), 2003

ÜÇOLUK G., Controlled genetic programming search for solving deceptive problems, Doctorate, E.ERKAN(Student), 2003

ÜÇOLUK G., Gene reordering and concurrency in genetic algorithms, Doctorate, O.TOLGA(Student), 2002

ÜÇOLUK G., Darwin-A Genetic algorithm language design and its cross compiler implementation, Postgraduate, A.ARSLAN(Student), 1999

ÜÇOLUK G., Darwin- a genetic algorithm language design and its C cross compiler implementation, Postgraduate, A.Arslan(Student), 1999

ÜÇOLUK G., A Method for improving automatic word categorization, Postgraduate, E.ERKAN(Student), 1997

ÜÇOLUK G., TOROSLU İ. H. , Turkish text compression using Huffman coding, Postgraduate, Y.Çiftçisoğ (Student), 1996

ÜÇOLUK G., Three dimensional object reconstruction from boundary data., Postgraduate, M.YOLMAZ(Student), 1995

ÜÇOLUK G., Automated geometry theorem proving, Postgraduate, D.EDE(Student), 1993

ÜÇOLUK G., Automated geometry theorem proving., Postgraduate, D.Ede(Student), 1993

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

- I. **Multiobjective Design Optimization of Building Space Layout, Energy, and Daylighting Performance**  
Dino I. G. , Üçoluk G.  
Journal of Computing in Civil Engineering, vol.31, 2017 (Journal Indexed in SCI)
- II. **Vision-Based Detection and Distance Estimation of Micro Unmanned Aerial Vehicles**  
Gökçe F., Ucoluk G., Sahin E., Kalkan S.  
SENSORS, vol.15, pp.23805-23846, 2015 (Journal Indexed in SCI)
- III. **Incremental assignment problem**  
Toroslu I. H. , Ucoluk G.  
INFORMATION SCIENCES, vol.177, no.6, pp.1523-1529, 2007 (Journal Indexed in SCI)
- IV. **To afford or not to afford: A new formalization of affordances toward affordance-based robot control**  
Sahin E., Çakmak M., Dogar M. R. , Uğur E., Ucoluk G.  
ADAPTIVE BEHAVIOR, vol.15, pp.447-472, 2007 (Journal Indexed in SCI)
- V. **A controlled genetic programming approach for the deceptive domain**  
KORKMAZ E. E. , Ucoluk G.  
IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS PART B-CYBERNETICS, vol.34, no.4, pp.1730-1742, 2004 (Journal Indexed in SCI)
- VI. **A realistic success criterion for discourse segmentation**  
Yondem M., Ucoluk G.  
COMPUTER AND INFORMATION SCIENCES - ISCIS 2003, vol.2869, pp.592-600, 2003 (Journal Indexed in SCI)
- VII. **Design and usage of a new benchmark problem for genetic programming**  
KORKMAZ E. E. , Ucoluk G.  
COMPUTER AND INFORMATION SCIENCES - ISCIS 2003, vol.2869, pp.561-567, 2003 (Journal Indexed in SCI)
- VIII. **Gene level concurrency in genetic algorithms**  
Sehitoglu O. T. , Ucoluk G.  
COMPUTER AND INFORMATION SCIENCES - ISCIS 2003, vol.2869, pp.976-983, 2003 (Journal Indexed in SCI)
- IX. **Genetic algorithm solution of the TSP avoiding special crossover and mutation**  
Ucoluk G.  
INTELLIGENT AUTOMATION AND SOFT COMPUTING, vol.8, no.3, pp.265-272, 2002 (Journal Indexed in SCI)

- X. **Automatic reconstruction of broken 3-D surface objects**  
Ucoluk G., Toroslu I.  
COMPUTERS & GRAPHICS-UK, vol.23, no.4, pp.573-582, 1999 (Journal Indexed in SCI)
- XI. **A genetic algorithm approach for verification of the syllable-based text compression technique**  
Ucoluk G., Toroslu I.  
JOURNAL OF INFORMATION SCIENCE, vol.23, no.5, pp.365-372, 1997 (Journal Indexed in SCI)
- XII. **A study of stationary, axially symmetric space-time geometries satisfying modified double duality equations using the exterior calculus package XTR for REDUCE**  
Dereli T., ÜÇOLUK G.  
Journal of Computational Physics, vol.99, no.1, pp.169-175, 1992 (Journal Indexed in SCI)
- XIII. **KALUZA-KLEIN REDUCTION OF GENERALIZED THEORIES OF GRAVITY AND NONMINIMAL GAUGE COUPLINGS**  
DERELI T., UCOLUK G.  
CLASSICAL AND QUANTUM GRAVITY, vol.7, no.7, pp.1109-1115, 1990 (Journal Indexed in SCI)
- XIV. **DIRECT-CURVATURE YANG-MILLS FIELD COUPLINGS INDUCED BY THE KALUZA-KLEIN REDUCTION OF EULER FORM ACTIONS IN 7 DIMENSIONS**  
DERELI T., UCOLUK G.  
CLASSICAL AND QUANTUM GRAVITY, vol.7, no.4, pp.533-539, 1990 (Journal Indexed in SCI)

## Books & Book Chapters

- I. **Introduction to programming concepts with case studies in Python**  
ÜÇOLUK G., KALKAN S.  
Springer, 2012
- II. **Gene Level Concurrency in Genetic Algorithms**  
ŞEHİTOĞLU O. T. , ÜÇOLUK G.  
in: Computer and Information Sciences ISCIS 2003 LNCS, Adnan Yazıcı, Cevat Şener, Editor, Springer-Verlag , pp.976-983, 2007

## Refereed Congress / Symposium Publications in Proceedings

- I. **Mikro İnsansız Hava Araçlarının Kademeli Sınıflandırıcılarla Algılanması ve Mesafe Tespiti**  
Gökçe F., Üçoluk G., Şahin E., Kalkan S.  
Türkiye Robotbilim Konferansı, İstanbul, Turkey, 26 - 27 October 2015
- II. **DARWIN: A Genetic Algorithm Language**  
ARSLAN A., Ucoluk G.  
28th International Symposium on Computer and Information Sciences (ISCIS), Paris, France, 28 - 29 October 2013, vol.264, pp.35-44
- III. **A genetic algorithm approach to the artillery target assignment problem**  
Sapaz B., TOROSLU İ. H. , ÜÇOLUK G.  
25th International Symposium on Computer and Information Sciences, ISCIS 2010, London, England, 22 - 24 September 2010, pp.39-42
- IV. **A pattern classification approach for boosting with genetic algorithms**  
Yalabık I., Yarman-Vural F. T. , Ucoluk G., ŞEHİTOĞLU O. T.  
22nd International Symposium on Computer and Information Sciences, Ankara, Turkey, 7 - 09 November 2007, pp.250-255
- V. **A Building Block Favoring Reordering Method for Gene Positions in Genetic Algorithms**  
ŞEHİTOĞLU O. T. , ÜÇOLUK G.  
GECCO 2001, San-Francisco, United States Of America, 7 - 11 July 2001, pp.571-575

**VI. A method for chromosome handling of r-permutations of n-element set in genetic algorithms**

Ucoluk G.

1997 IEEE International Conference on Evolutionary Computation (ICEC 97), Indiana, United States Of America, 13

- 16 April 1997, pp.55-58

**Citations**

Total Citations (WOS):366

h-index (WOS):8