

# Prof. FEHİME NİHAN ÇİÇEKLİ

## Personal Information

**Office Phone:** [+90 312 210 5582](tel:+903122105582)

**Email:** [cicekli@metu.edu.tr](mailto:cicekli@metu.edu.tr)

**Web:** <http://www.ceng.metu.edu.tr/~nihan>

**Address:** Ortadoğu Teknik Üniversitesi Bilgisayar Mühendisliği Bölümü Dumlupınar cad No.1 ODTÜ, Ankara 06800

## International Researcher IDs

ScholarID: X7\_aHToAAAAJ

ORCID: 0000-0003-3215-754X

Publons / Web Of Science ResearcherID: D-2004-2017

ScopusID: 12039607400

Yoksis Researcher ID: 1199

## Education Information

Doctorate, Imperial College of Science, Technology and Medicine, Bilgisayar Mühendisliği, United Kingdom 1989 - 1993

Postgraduate, Ihsan Dogramaci Bilkent University, Institute Of Engineering And Natural Sciences, Bilgisayar Mühendisliği (YI) (Tezli), Turkey 1986 - 1988

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, Turkey 1982 - 1986

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, Temporal Objects in Deductive Databases, Imperial College of Science, Technology and Medicine, Engineering, Computing, 1993

Postgraduate, An Object Memory for an Object-Oriented Database Management System, Ihsan Dogramaci Bilkent University, Faculty Of Engineering, Department Of Computer Engineering, 1988

## Research Areas

Database Systems

## Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 2011 - Continues

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 2006 - 2011

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Computer Engineering, 1998 - 2006

Associate Professor, University of Central Florida, Mühendislik, Bilgisayar Mühendisliği, 2001 - 2003

## Academic and Administrative Experience

Fakülte Yönetim Kurulu Üyesi, Middle East Technical University, Faculty of Engineering, 2011 - 2017

## Courses

Database Management Systems, Undergraduate, 2021 - 2022

Information Retrieval, Doctorate, 2021 - 2022

Design and analysis of algorithms, Doctorate, 2021 - 2022

Data Structures, Undergraduate, 2021 - 2022

## Advising Theses

ÇİÇEKLİ F. N., An application for continuous behavioral health monitoring and delivering digital personalized behavior change interventions, Postgraduate, M.BAŞKAYA(Student), 2021

ÇİÇEKLİ F. N., Using learning to rank for a top-n recommendation system in tv domain, Postgraduate, B.ACAR(Student), 2016

ÇİÇEKLİ F. N., Semantic search on turkish news domain with automatic query expansion, Postgraduate, T.FINDIK(Student), 2016

ÇİÇEKLİ F. N., Multimedia data modeling and semantic analysis by multimodal decision fusion, Doctorate, M.GÜDER(Student), 2015

ÇİÇEKLİ F. N., Self management of patients with ankylosing spondylitis through a personal health system, Postgraduate, M.GENÇTÜRK(Student), 2015

ÇİÇEKLİ F. N., A graph-based core model and a hybrid recommender system for TV users, Postgraduate, A.TAŞCI(Student), 2015

ÇİÇEKLİ F. N., A content-boosted matrix factorization technique via user-item subgroups, Postgraduate, E.ASLAN(Student), 2014

ÇİÇEKLİ F. N., Data interoperability through federated semantic metadata registries, Doctorate, A.ANIL(Student), 2014

ÇİÇEKLİ F. N., A graph based collaborative and context aware recommendation system for TV programs, Postgraduate, E.ŞAMDAN(Student), 2014

ÇİÇEKLİ F. N., A user modeling and recommendation system by means of social networks, Postgraduate, A.KARAKAYA(Student), 2014

ÇİÇEKLİ F. N., A TV content augmentation system exploiting rule based named entity recognition method, Postgraduate, Y.EMRE(Student), 2014

ÇİÇEKLİ F. N., Enhancing content management systems with semantic capabilities, Postgraduate, S.GÖNÜL(Student), 2012

ÇİÇEKLİ F. N., An advanced personal health record platform for patient empowerment, Postgraduate, Ş.POSTACI(Student), 2012

ÇİÇEKLİ F. N., Human body part detection and multi-human tracking in surveillance videos, Postgraduate, H.HÜSEYİN(Student), 2012

ÇİÇEKLİ F. N., Event boundary detection using web-casting texts and audio-visual features, Postgraduate, M.BAYAR(Student), 2011

ÇİÇEKLİ F. N., Event boundary detection using web-cating texts and audio-visual features, Postgraduate, B.Müjdat(Student), 2011

ÇİÇEKLİ F. N., A recommendation framework using ontological user profiles, Postgraduate, Ç.YAMAN(Student), 2011

ÇİÇEKLİ F. N., A recommendation framework using ontological user, Postgraduate, Ç.Yaman(Student), 2011

ÇİÇEKLİ F. N., An ontology-driven video annotation and retrieval system, Postgraduate, G.DEMİRDİZEN(Student), 2010

ÇİÇEKLİ F. N., An ontology - driven video annotation and retrieval system, Postgraduate, G.Demirdizen(Student), 2010

ÇİÇEKLİ F. N., Searching documents with semantically related keyphrases, Postgraduate, İ.AYGÜL(Student), 2010

ÇİÇEKLİ F. N., A hybrid video recommendation system based on a graph-based algorithm, Postgraduate, G.ÖZTÜRK(Student), 2010

ÇİÇEKLİ F. N., Face identification, gender and age groups classifications for semantic annotation of videos, Postgraduate, G.YAPRAKKAYA(Student), 2010

ÇİÇEKLİ F. N., Face identification, gender and age groups classifications for semantic annotation videos, Postgraduate, G.Yaprakkaya(Student), 2010

ÇİÇEKLİ F. N., Çiçekli F., Data integration over horizontally partitioned databases in service-oriented data grids, Postgraduate, H.Kevser(Student), 2010

ÇİÇEKLİ F. N., An ontology-based retrieval system using semantic indexing, Postgraduate, S.Kara(Student), 2010

ÇİÇEKLİ F. N., A service oriented peer to peer web service discovery mechanism with categorization, Postgraduate, M.Onur(Student), 2010

ÇİÇEKLİ F. N., Providing scalability for an automated Web service composition framework, Postgraduate, E.KAYA(Student), 2010

ALPASLAN F. N., ÇİÇEKLİ F. N., Probabilistic latent semantic analysis based framework for hybrid social recommender systems, Postgraduate, E.ERYOL(Student), 2010

ÇİÇEKLİ F. N., Natural language query processing in ontology based multimedia databases, Postgraduate, F.ALACA(Student), 2010

ÇİÇEKLİ F. N., Automatic video categorization and summarization, Postgraduate, K.DEMİRTAŞ(Student), 2009

ÇİÇEKLİ F. N., Design and implementation of an ontology extraction framework and a semantic search engine over JSR-170 compliant content repositories, Postgraduate, G.ALUÇ(Student), 2009

ÇİÇEKLİ F. N., Data mining methods for clustering power quality data collected via monitoring systems installed on the electricity network, Postgraduate, M.GÜDER(Student), 2009

ÇİÇEKLİ F. N., Abductive planning approach for automated web service composition using only user specified inputs and outputs, Postgraduate, E.KAAN(Student), 2009

ÇİÇEKLİ F. N., Automatic web service composition with ai planning, Postgraduate, M.KUZU(Student), 2009

ÇİÇEKLİ F. N., Ontology-based spatio-temporal video management system, Postgraduate, A.ŞİMŞEK(Student), 2009

ÇİÇEKLİ F. N., A monolithic approach to automated composition of semantic web services with the event calculus, Postgraduate, Ç.OKUTAN(Student), 2009

ÇİÇEKLİ F. N., Metadata extraction from text in soccer domain, Postgraduate, Ö.GÖKTÜRK(Student), 2008

ÇİÇEKLİ F. N., Automatic composition of semantic web services with the abductive event calculus, Postgraduate, E.Kırcı(Student), 2008

ÇİÇEKLİ F. N., An ontology-based multimedia information management system, Postgraduate, H.TARAKÇI(Student), 2008

ÇİÇEKLİ F. N., Realizing the specification and execution of workflows through the event calculus, Postgraduate, H.Yılmaz(Student), 2006

ÇİÇEKLİ F. N., Realizing the specification and execution of workflows through the Event Calculus, Postgraduate, H.YILMAZ(Student), 2006

ÇİÇEKLİ F. N., Application of schema matching methods to semantic web service discovery, Postgraduate, F.KARAGÖZ(Student), 2006

ÇİÇEKLİ F. N., Natural language interface on a video data model, Postgraduate, G.Erözel(Student), 2005

ÇİÇEKLİ F. N., An MPEG-7 video database system for content-based management and retrieval, Postgraduate, Ç.ÇELİK(Student), 2005

ÇİÇEKLİ F. N., Automated WEB service composition with event calculus, Postgraduate, O.AYDIN(Student), 2005

ÇİÇEKLİ F. N., Time-based workflow mining, Postgraduate, D.CANTÜRK(Student), 2005

YAZICI A., ÇİÇEKLİ F. N., Spatio-temporal querying in video databases, Postgraduate, M.KÖPRÜLÜ(Student), 2001

ÇİÇEKLİ F. N., Formalizing workflows using the event calculus, Postgraduate, Y.YILDIRIM(Student), 2000

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

- I. **Early detection of fake news on emerging topics through weak supervision**  
Akdag S. H., ÇİÇEKLİ F. N.  
Journal of Intelligent Information Systems, 2024 (SCI-Expanded)
- II. **BOFRF: A Novel Boosting-Based Federated Random Forest Algorithm on Horizontally Partitioned Data**  
Gencturk M., SINACI A. A., Cicekli N. K.  
IEEE ACCESS, vol.10, pp.89835-89851, 2022 (SCI-Expanded)
- III. **Multi-modal video event recognition based on association rules and decision fusion**  
Guder M., Cicekli N. K.  
MULTIMEDIA SYSTEMS, vol.24, no.1, pp.55-72, 2018 (SCI-Expanded)
- IV. **SVAS: Surveillance Video Analysis System**  
Kardas K., Cicekli N. K.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.89, pp.343-361, 2017 (SCI-Expanded)
- V. **Postmarketing Safety Study Tool: A Web Based, Dynamic, and Interoperable System for Postmarketing Drug Surveillance Studies**  
Sinaci A. A., Erturkmen G. B. L., Gonul S., Yuksel M., Invernizzi P., Thakrar B., Pacaci A., Cinar H. A., Cicekli N. K.  
BIOMED RESEARCH INTERNATIONAL, vol.2015, 2015 (SCI-Expanded)
- VI. **Online annotation of faces in personal videos by sequential learning**  
Yilmazturk M. C., ULUSOY İ., ÇİÇEKLİ F. N.  
MULTIMEDIA TOOLS AND APPLICATIONS, vol.63, no.3, pp.591-613, 2013 (SCI-Expanded)
- VII. **An ontology-based retrieval system using semantic indexing**  
KARA S., ALAN O., Sabuncu O., Akpınar S., Cicekli N. K., Alpaslan F. N.  
INFORMATION SYSTEMS, vol.37, no.4, pp.294-305, 2012 (SCI-Expanded)
- VIII. **Dynamic planning approach to automated web service composition**  
Kuzu M., Cicekli N. K.  
APPLIED INTELLIGENCE, vol.36, no.1, pp.1-28, 2012 (SCI-Expanded)
- IX. **A systematic approach to the integration of overlapping partitions in service-oriented data grids**  
Sunercan H. K., Alpdemir M. N., Cicekli N. K.  
FUTURE GENERATION COMPUTER SYSTEMS-THE INTERNATIONAL JOURNAL OF ESCIENCE, vol.27, no.6, pp.667-680, 2011 (SCI-Expanded)
- X. **Automatic categorization and summarization of documentaries**  
Demirtas K., Cicekli N. K., ÇİÇEKLİ İ.  
JOURNAL OF INFORMATION SCIENCE, vol.36, no.6, pp.671-689, 2010 (SCI-Expanded)
- XI. **Automated composition of web services with the abductive event calculus**  
Ozorhan E. K., Kuban E. K., Cicekli N. K.  
INFORMATION SCIENCES, vol.180, no.19, pp.3589-3613, 2010 (SCI-Expanded)
- XII. **A monolithic approach to automated composition of semantic web services with the Event Calculus**  
Okutan C., Cicekli N. K.  
KNOWLEDGE-BASED SYSTEMS, vol.23, no.5, pp.440-454, 2010 (SCI-Expanded)
- XIII. **Natural language querying for video databases**  
Erozel G., Cicekli N. K., Cicekli I.  
INFORMATION SCIENCES, vol.178, no.12, pp.2534-2552, 2008 (SCI-Expanded)
- XIV. **Generalizing predicates with string arguments**  
Cicekli I., Cicekli N. K.  
APPLIED INTELLIGENCE, vol.25, no.1, pp.23-36, 2006 (SCI-Expanded)
- XV. **Formalizing the specification and execution of workflows using the event calculus**  
Cicekli N. K., Cicekli I.  
INFORMATION SCIENCES, vol.176, no.15, pp.2227-2267, 2006 (SCI-Expanded)
- XVI. **Spatio-temporal querying in video databases**

Koprulu M., Cicekli N., Yazici A.

INFORMATION SCIENCES, vol.160, no.1-4, pp.131-152, 2004 (SCI-Expanded)

**XVII. A logic programming framework for modeling temporal objects**

Kesim F. N., Sergot M.

IEEE TRANSACTIONS ON KNOWLEDGE AND DATA ENGINEERING, vol.8, no.5, pp.724-741, 1996 (SCI-Expanded)

## Articles Published in Other Journals

**I. Implementing an object-oriented deductive database using temporal reasoning**

ÇİÇEKLİ F. N., Sergot M.

JOURNAL OF DATABASE MANAGEMENT, vol.7, no.4, pp.21-34, 1996 (Peer-Reviewed Journal)

## Books & Book Chapters

**I. Logic Programs, Norms and Action**

ÇİÇEKLİ F. N.

Springer, 2012

## Refereed Congress / Symposium Publications in Proceedings

**I. A TV Content Augmentation System Exploiting Rule Based Named Entity Recognition Method**

Isiklar Y. E., Cicekli N.

30th International Symposium on Computer and Information Sciences (ISCIS), London, Canada, 21 - 24 September 2015, vol.363, pp.349-357

**II. Feature construction, selection and revealing patterns of power quality event data Güç kalitesi olay verileri için nitelik oluşturma, seçme ve örüntü çıkarma**

Güder M., Salor Ö., ÇİÇEKLİ F. N., Çadirci I.

18th IEEE Signal Processing and Communications Applications Conference, SIU 2010, Diyarbakır, Turkey, 22 - 24 April 2010, pp.13-16

**III. Providing scalability for an automated web service composition framework**

Kaya E., Kuzu M., ÇİÇEKLİ F. N.

25th International Symposium on Computer and Information Sciences, ISCIS 2010, London, England, 22 - 24 September 2010, vol.62 LNEE, pp.329-332

**IV. Gender and age groups classifications for semantic annotation of videos**

Yaprakaya G., ÇİÇEKLİ F. N., ULUSOY İ.

25th International Symposium on Computer and Information Sciences, ISCIS 2010, London, England, 22 - 24 September 2010, vol.62 LNEE, pp.227-230

**V. Summarization of documentaries**

Demirtas K., Cicekli I., ÇİÇEKLİ F. N.

25th International Symposium on Computer and Information Sciences, ISCIS 2010, London, England, 22 - 24 September 2010, vol.62 LNEE, pp.105-108

**VI. Event Boundary Detection Using Audio Visual Features and Web casting Texts with Imprecise Time Information**

MÜJDAT B., ALAN Ö., SAMET A., ORKUNT S., ÇİÇEKLİ F. N., ALPASLAN F. N.

2010 IEEE International Conference on Multimedia and Expo (ICME 2010), 19 - 21 July 2010

**VII. Analysis of Face Recognition Algorithms for Online and Automatic Annotation of Personal Videos**

YILMAZTÜRK m., ULUSOY PARNAS İ., ÇİÇEKLİ F. N.

ISCIS, 6 - 08 May 2010

**VIII. An Ontology-Based Retrieval System Using Semantic Indexing**

kara s., alan ö., SABUNCU O., akpınar s., ÇİÇEKLİ F. N., ALPASLAN F.

ICDE Workshop on Data Engineering meets the Semantic Web (DESWEB 2010), 5 March - 06 April 2010

**IX. Event Extraction from Turkish Football Web casting Texts Using Supervised Templates**

DORUK T., ALAN Ö., ORKUNT S., SAMET A., ÇİÇEKLİ F. N., ALPASLAN F. N.

International Conference on Semantic Computing (ICSC 2009), 14 - 16 September 2009

**X. Event Extraction from Turkish Football Web-casting Texts Using Hand-crafted Templates**

Tunaoglu D., Alan O., Sabuncu O., Akpınar S., Cicekli N. K., ALPASLAN F. N.

3rd International Conference on Semantic Computing (ICSC 2009), California, United States Of America, 14 - 16 September 2009, pp.466-467

## **Metrics**

Publication: 29

Citation (WoS): 288

Citation (Scopus): 400

H-Index (WoS): 10

H-Index (Scopus): 11

## **Non Academic Experience**

METU

METU

METU

University of Central Florida

Bilkent University

Bilkent University