Tolga Can, PhD

Professor
Department of Computer Engineering
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Education:

Degree	Major	School	Year
B.Sc.	Computer Engineering	Middle East Technical University, Ankara, Turkey	1998
M.Sc.	Computer Science	University of California at Santa Barbara, CA	2003
Ph.D.	Computer Science	University of California at Santa Barbara, CA	2004

Ph.D. Dissertation:

"Automated and Efficient Analysis of Protein Structures," Department of Computer Science, University of California at Santa Barbara (USA), Aug. 2004.
Supervisor: Prof. Yuan-Fang Wang

Employment:

Position	Institute	Years
Teaching Assist.	Middle East Technical University, Ankara, Turkey	1998-2000
Research Assist.	University of California at Santa Barbara, CA	2001-2004
Postdoctoral Researcher	University of California at Santa Barbara, CA	2004-2005
Tenure track faculty member	Middle East Technical University, Ankara, Turkey	2006-now

Professional Memberships:

- International Society for Computational Biology (ISCB) - member since 2009
- Turkish Bioinformatics Society (founding member)
- Association of Computing Machinery (ACM) SIGBio – member since 2014

Research Interests:

Computational Systems Biology, Graph Theory, Algorithms, Machine Learning

Publications:
See my Google Scholar Profile at:
https://scholar.google.com/citations?hl=en&user=5U97BEwAAAAJ

Supervised Ph.D. and M.Sc. Theses:
See the list at: http://user.ceng.metu.edu.tr/~tcan/pastStudents.html

Administrative Duties:

Vice Chair: Department of Computer Engineering, Middle East Technical University, Ankara, Turkey, April 2007 – July 2010 and July 2017-July 2018

Teaching Activities:

New courses proposed:

1. CENG 734 Advanced Topics in Bioinformatics (Graduate Course)
2. CENG 465 Introduction to Bioinformatics (Undergraduate Technical Elective Course)
3. CENG 222 Statistical Methods for Computer Engineering (Undergraduate Course)
4. CENG 773 / 570 Computational Geometry (Graduate Course)
5. CENG 732 Computer Animation (Graduate Course)
6. BIN 504 Probabilistic and Statistical Modeling for Bioinformatics (Graduate Course)

Courses Taught:

In addition to the proposed courses listed above, I have taught the following courses:

1. CENG 140 C Programming (Undergraduate Course)
2. CENG 301 Data Structures and Algorithms (Service Course)
3. CNG 315 Algorithms (METU NCC campus)
4. CENG 477 Introduction to Computer Graphics (Undergraduate Course)
5. SE 542 Human Computer Interaction (Graduate Course)

Awards:

- 2015: 2014-2015 Academic Year METU Teacher of the Year Award, Middle East Technical University, Prof. Dr. Mustafa N. PARLAR Education and Research Foundation
- 2014: Turkish Science Academy Young Scientists Award (BAGEP)
- 2009: 2008-2009 Academic Year METU Teacher of the Year Award, Middle East Technical University, Prof. Dr. Mustafa N. PARLAR Education and Research Foundation
- 2000-2002: Fulbright Scholarship for M.Sc. studies, IIE (International Institute of Education)

CS Skills:

Proficient in:

- Programming in C/Java
- Advanced data structures and algorithms
- Computer Graphics: OpenGL programming, Ray tracing, Programmable Shaders
- Computational geometry
- Graph algorithms

Funded Research Projects:

Title	Funded by	Role in Project	Duration	Budget
Local topological feature vector based comparison of integrated biological networks	TUBITAK (NSF of Turkey)	PI	12/01/2014-12/01-2016	102,124 TL
SYSPATHO: New Algorithms for Host Pathogen Systems Biology	EU FP7	Local PI at METU	10/01/2010-10/01/2013	90,000 €
Construction and Analysis of Genome-scale PPI Networks Using Statistical Methods	TUBITAK	PI	02/01/2007-02/01/2010	96,222 TL
Analysis of Alternative Polyadenylation for Implications in Breast Cancer	TUBITAK	Researcher	07/01/2013-07/01/2015	200,000 TL
Parallelization of Radio Wave Propagation Methods on GPU	Ministry of Science and Technology – Industry-University Joint Project Program	PI	01/10/2012-01/10/2014	200,000 TL

Non-Academic Experience:

- Consultant, MetaVerse, Virtual Reality based psychotherapy for social phobia, 2017-2018
- Consultant, SimBT, Smart Energy Aware Systems, EU ITEA2 Project, 2014-2016
- Consultant, AGMLab, Adaptive Content Delivery on the Cloud, EU ITEA2 Project, 2010 – 2012
- Consultant, AGMLab, SOLIM: Spatial Ontology Language for Multimedia Information Modeling, Eurostars Project, 2007-2009
- Consultant, MODSIMMER Combat Simulation, 2006 – 2007

Service Activities:

- Training high-school students for the International Olympiad in Informatics (IOI) (2010-)
- Conference Co-chair, HIBIT (Int. Symp. on Health Informatics and Bioinformatics), 2012
- Served as a reviewer in the following journals:
  - Bioinformatics
  - Nucleic Acids Research
  - BMC Genomics
  - PLOS One
  - IEEE Transactions on Knowledge and Data Engineering
  - IEEE/ACM Transactions on Computational Biology and Bioinformatics
  - Functional and Integrative Genomics
  - OMICS: A journal of integrative biology

Leisure activities:

- Electric bass (Latest cover: Metallica – Orion)
- Basketball
- Constant reader (Favorites: Stephen King, Walter Isaacson, Cixin Liu, Ted Chang)
  - GoodReads profile: https://www.goodreads.com/user/show/46917574-tolga-can
- Programming (Latest project: Shadow Mapping in OpenGL in iOS using OpenGL ES)
  - CodeForces profile: http://codeforces.com/profile/tcantr