

Name: Emad

Last Name: Zahedi

Email: Zahediem@msu.edu Phone: +15178990527

#### Address:

1) Department of Mathematics, Michigan State University, East Lansing, MI 48824-1027, U.S.A.

2) Department of Computer Science and Engineering, Michigan State University East Lansing, MI 48824, U.S.A.

Sex: male

#### **Education**:

- Advanced Diploma, Rodehen Islamic Azad University 2004-6, (Education mathematics).
- Bachelor of Science South Tehran Azad University 2006-8, (Applied mathematics).
- Master of Science University of Tehran 2008-11, (Pure mathematics).
- Master of Science Michigan State University 2014-16, (Computer Science).
- PhD of Science Michigan State University 2011-17, (Mathematics).
- PhD of Science Michigan State University 2013-17, (Computer Science dual with math).

#### **Master's thesis in mathematics:**

Some problems in character theory of finite groups.

## **Doctoral dissertation Mathematics and Computer Science:**

Distance preserving graphs.

### **Some Background:**

Mathematical Analysis, Real Analysis, Complex Variable, Numerical Analysis, ODE and PDE, Chaos Dynamic, Manifold Geometry, Knot Theory, Algebra, Linear Algebra, Group Theory, Permutation Group, Character Theory, Discrete Mathematics, Number Theory, Combinatorics, Graph Theory, Data Mining, Pattern Recognition, Social Network Analysis, Computer Vision, Advance Operating System, Evolutionary algorithms, Design Algorithms and Algorithm graph.

#### **Interested in:**

Graph Theory, Data Analysis and Network Analysis.

### **Some Honors and Awards:**

- 1) Ranked 2<sup>th</sup> in entrance exam test for undergraduate degree.
- 2) Member of Iranian mathematical society.
- 3) Ranked 1 in interior mathematics Olympiad exam in province of Islamic Azad universities of Tehran
- 4) Awarded as superior student in the second Math seminar in Azad University (2010).
- 5) Graduate Teaching Assistant award, in department of mathematics at Michigan State University on 25<sup>th</sup> of April 2014.
- 6) Best student paper award for the paper titled, Distance Preserving Graphs, paper submitted for the 45th Conference on Combinatorics, Graph Theory, and Computing at Florida Atlantic University, 2014.
- 7) Travel award: from the graduate school at msu \$350.
- 8) Travel award: from the cse department at msu \$150.

# **Work Experiences**

- 1) Teaching assistant of Introduction finite groups, Algebra 1, University of Tehran.
- 2) Teaching assistant of Calc.I, MTH 124, University of Tehran.
- 3) Teaching assistant of Calc.II, MTH 133, University of Tehran.
- 4) Instructor of the course Calc.III, MTH 234, Michigan State University.
- 5) Instructor of the course Calc.VI, MTH 235, Michigan State University.
- 6) Teaching assistant of Discrete mathematics in Computer Science, CSE 260, Michigan State University.
- 6) Attending in conference "Group Theory" in Ferdousi-mashahad University.
- 7) Attending in conference ``45th Conference on Combinatorics, Graph Theory, and Computing' at Florida Atlantic University, 2014.
- 8) Attending workshop 1<sup>st</sup> Lake Michigan Workshop on `Combinatorics and Graph Theory' March 2014.

### **Publications:**

#### a) Papers

- 1) Powers of irreducible character (with M. R. Darafsheh, and M.L Lewis), preprint.
- 2) Distance preserving graphs and graph products (with Bruce Sagan, and Mohammad Khalifeh), Ars Combin., accepted.
  - 3) Distance preserving graphs, ArXiv.
- 4) An Evolutionary Framework for Analyzing the Distance Preserving Property of Weighted Graphs (with M. Mirmomeni, B. Punch and A-H. Esfahanian.), under review.

# b) Oral presentation

1) E. Zahedi, M.H. Khalifeh, H. Faramarzi, A.R. Ashrafi.

Automorphism group of a family of Dendrimer Nanostars (International ASET, ACNFA2010 Ottawa-Canada ).

2) H. Faramarzi, M.H. Khalifeh, H. Yousefi-Azari, E.Zahedi

The Hosaya and Merrifield-Simmons Numbers of Water-Soluble Polyaryl Ether Dendrimer Nanostars(International ASET, ACNFA2010 Ottawa-Canada).

#### 3) Emad Zahedi

Distance Preserving Graphs, (45th Conference on Combinatorics, Graph Theory, and Computing at Florida Atlantic University, 2014).

#### c) Books

*Calculus* (under preparation)

# Languages

Persian: Native

English: Satisfactory

#### **Interests and Hobbies**

Swimming, football, watching movies, sightseeing and car-racing, ping pong.

# **Recommended by:**

## Abdol-Hossein Esfahanian

Associate Professor & Associate Chair

Department of Computer Science and Engineering

428 South Shaw Lane, Room 3115 Engineering Building

Michigan State University

East Lansing, MI 48824-1226, U.S.A.

Email: esfahanian@cse.msu.edu

URL: http://www.cse.msu.edu/~esfahani

Tel: (517)432-9476 Fax: (517) 432-1061

# Eric Torng

Associate Professor & Graduate Director Department of Computer Science and Engineering

428 South Shaw Lane, Room 3115 Engineering Building

Michigan State University

East Lansing, MI 48824-1226, U.S.A.

Email: esfahanian@cse.msu.edu

URL: <a href="http://www.cse.msu.edu/~Torng">http://www.cse.msu.edu/~Torng</a> Tel: (517)432-9476

Fax: (517) 432-1061

# Bruce Sagan

Full Professor & Director of Undergraduate Studies Department of Mathematics Wells Hall, 619 Red Cedar Road Michigan State University East Lansing, MI 48824-1027

Tel: (517) 355-8329 FAX: (517) 432-1562

e-mail: sagan@math.msu.edu URL: www.math.msu.edu/~sagan

## M.R. Darafsheh

Full Professor
Department of Mathematics & Computer Science,
University of Tehran,
Tehran 14155-6455, IRAN
darafsheh@ut.ac.ir

# Robert W. Bell

Associate Professor & Lyman Briggs College Dean Lyman Briggs College Dean & Department of Mathematics Michigan State University

Address: W-32 Holmes Phone: (517) 353-4857 Email: bellro@msu.edu