

# CURRICULUM VITAE

## PERSONAL DATA

- *First Name:* BANAFSHEH
- *Last Name:* AKBARI
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## ACADEMIC BACKGROUND

- K. N. Toosi University of Technology, IRAN; 2009–2014; Ph.D. in Pure Mathematics-Algebra.  
Thesis topic: *OD-Recognizability of Finite Groups*,  
Supervisor: Full Prof. A. R. MOGHADDAMFAR.
- K. N. Toosi University of Technology, IRAN; 2007–2009; M.Sc. in Pure Mathematics-Algebra.  
Project title: *OD-Characterization of Certain Finite Groups with Connected Prime Graph*,  
Supervisor: Full Prof. A. R. MOGHADDAMFAR.
- Qom University, IRAN; 2003–2007; B.Sc. in Pure Mathematics.

## ACADEMIC POSITIONS

- Teaching Associate of Cornell University, Department of Mathematics. Aug. 2022–present.
- Assistant Professor of Sahand University of Technology, Department of Mathematics, Feb. 2015–Jan. 2022.

## HONOURS AND AWARDS

- IMU CDC Abel Visiting Fellowship at the University of Salerno, 2021.
- Invited International Scientist Grant at the École Normale Supérieure of Paris, 2021/2022.

## SERVICE ROLES

- Reviewer of American Mathematical Society (AMS), Reviewer Number: 152387

## PUBLICATIONS

- [9] B. AKBARI, C. DELIZIA and C. MONETTA, *On The Solubilizer of an Element in a Finite Group*, Submitted.
- [8] B. AKBARI, MARK L. LEWIS, J. MIRZAJANI and A. R. MOGHADDAMFAR, *The Solubility Graph Associated with a Finite Group*, International Journal of Algebra and Computation, 30(8)(2020), 1555-1564.
- [7] B. AKBARI, *A Characterization of Some Simple Unitary Groups via Order and Degree Pattern of Solvable Graph*, Journal of Algebraic Structures and Their Applications, 6(2)(2019), 115-127.
- [6] B. AKBARI, *Hall Graph of a Finite Group*, Note di Matematica, 39(2)(2019), 25-37.
- [5] B. AKBARI,  *$OD_s$ -Characterization of Some Low-Dimensional Finite Classical Groups*, International Electronic Journal of Algebra, 24(2018), 73-90.
- [4] B. AKBARI, N. IYORI and A. R. MOGHADDAMFAR, *A New Characterization of Some Simple Groups by Order and Degree Pattern of Solvable Graph*, Hokkaido Mathematical Journal, 45(2016), 337-363.
- [3] B. AKBARI and A. R. MOGHADDAMFAR, *On Recognition by Order and Degree Pattern of finite Simple groups*, Southeast Asian Bulletin of Mathematics, 39(2015), 163-172.
- [2] B. AKBARI and A. R. MOGHADDAMFAR,  *$OD$ -Characterization of Certain Four Dimensional Linear Groups with Related Results Concerning Degree Patterns*, Frontiers of Mathematics in China, 10(1)(2015), 1-31.
- [1] B. AKBARI and A. R. MOGHADDAMFAR, *Recognizing by Order and Degree Pattern of Some Projective Special Linear Groups*, International Journal of Algebra and Computation, 22(6)(2012), 22 pages.

## TEACHING EXPERIENCE

- Sahand University of Technology
  - Calculus: Winter and Fall 2015–2021
  - Statistics & Probability: Fall 2016, Fall 2017, Fall 2018, Fall 2019
  - Introduction to Algebra: Winter 2019, Winter 2020
  - Algebra: Fall 2020
  - Introduction to Combinatorics: Fall 2019, Winter 2021

- Graph Theory: Winter 2021
- Finite Group Theory for Masters Students: Winter 2015
- Advanced Algebra for Masters Students: Fall 2016
- Advanced Finite Group Theory for Ph.D. Students: Fall 2018
- Permutation Groups for Ph.D. Students: Winter 2019
- K. N. Toosi University of Technology
  - Calculus: Fall 2009, Winter 2010

### M.Sc. SUPERVISION

- NASTARAN JAFARI MOTLAGH, *Project's title: OD-Characterization of Some Projective Special Linear Groups over The Binary Field and Their Automorphism Groups*, October 2017.

### CONFERENCE PRESENTATIONS

- *Structure of Vertex Neighbourhoods of Solubility Graphs*, University of Padova, May 11, 2022, Padova, Italy.
- *Graphs Associated with Finite Groups*, University of Salerno, December 9, 2021, Salerno, Italy.
- *A Study on Finite Groups through Some Certain Subsets*, 13th Iranian International Group Theory Conference, November 18–19, 2020, Urmia University, Urmia, Iran.
- *Recognition of Some Simple Groups by Certain Properties of Their Prime Graphs*, 4th International Conference on Combinatorics, Cryptography, Computer Science and Computing, November 20–21, 2019, Iran University of Science & Technology, Tehran, Iran.
- *Some Applications of Graph Theory to Study of Finite Groups*, 4th International Conference on Combinatorics, Cryptography, Computer Science and Computing, November 20–21, 2019, Iran University of Science & Technology, Tehran, Iran.
- *The Graphs Associated with Some Classes of Finite Groups*, 50th Annual Iranian Mathematics Conference, August 26–29, 2019, Shiraz, Iran.
- *A Characterization of Projective Special Linear Group  $L_3(q)$  Through Hall Graph*, 50th Annual Iranian Mathematics Conference, August 26–29, 2019, Shiraz, Iran.
- *On Solvable Graph Associated with a Finite Group*, 11th Iranian Group Theory Conference, January 30–31, 2019, Yazd, Iran.

- *Characterization of Finite Groups by Non-Solvable Graphs and Solvabilizers*, 10th Iranian Group Theory Conference, January 24–26, 2018, Tehran, Iran.
- *On Recognition of Finite Simple Groups by Order and Degree Pattern of Solvable Graph*, 25th Iranian Algebra Seminar, July 20–21, 2016, Sabzevar, Iran.
- *Characterizability of Some Linear Groups by Order and Degree Pattern*, Fifth International Group Theory Conference, March 13–15, 2013, Mashhad, Iran.
- *Recognizing by Order and Degree Pattern of Symplectic and Orthogonal Groups*, Summer School on Finite Groups and Related Geometrical Structures, August 29–September 9, 2011, Venice, Italy.

## ADDITIONAL SKILLS

- Programming with Python.
- GAP System for Computational Group Theory.