Afsaneh Shams

Athens, GA, USA

✉ Afsaneh.Shams@uga.edu in www.linkedin.com/in/afsaneh-shams-b2b0ba1b6/ ○ https://afsham.github.io/Afsaneh-Shams.github.io/

Education:

Ph.D. in Computer Science   Aug. 2020-Spring 2025

University of Georgia, Athens, GA, USA, GPA: 3.77   (Exp. Grad.)

M.Sc. in Electrical and Computer Engineering   Sep. 2012-March 2016

Shiraz University, Shiraz, GPA: 3.43

B.Sc. in Electrical and Computer Engineering   Sep. 2007-Sep. 2011

Shiraz University, Shiraz, GPA: 3.45

Research Interests:

- Artificial Intelligence and Machine Learning
- Evolutionary Algorithms
- Generative AI for Real-World Applications

Work Experience:

Research and Development Scientist-Intern, Roocreations Company, San Jose, CA   June. 2024-Aug. 2024

Development and simulation work on the new AI Network

Teaching Assistant, University of Georgia, Athens, GA   Aug. 2020-Present

- Courses :
  - CSCI1301L, Lab Instructor
  - CSCI 2610
  - CSCI 1360E
  - CSCI 4150

Project Design Engineer, PIDEC, Shiraz   June 2012-March 2018

Experience of working in more than 10 projects in the electrical and computer engineering fields

Skills:

- Programming Language: Python, Java, Matlab, C
- Database Management: PostgreSQL, MySQL, phpMyAdmin, Neo4j
- Machine Learning & Data Science: PyTorch, TensorFlow
- Analyzer & Design Tools: Figma, WEKA, StarUML, VHDL, Pspice

Courses I am Prepared to Teach:

- CSCI 2610
- CSCI 1360
- CSCI 4150/6150
- CSCI 1301
- CSCI 2780
- CSCI 3030
- CSCI 4550/6550
- CSCI 4560/6560
- CSCI 4800/6800

Publications:

- Afsaneh Shams, Drew Becker, Kyle Becker, Soheyla Amirian, Khaled Rasheed. "Evolving Efficient CNN Based Model for Image Classification." In Proceedings of the 2023 International Conference on the World Congress in Computer Science, Computer Engineering, and Applied Computing (CSCE'23), July 24-27, 2023, Luxor (MGM), Las Vegas, Nevada, USA. IEEE Computer Society, 2023. Hamid R. Arabnia, Leonidas Deligiannidis, Fernando G. Tinetti, and Quoc-Nam Tran (Eds.). ISBN: 979-8-3503-2759-5, IEEE Catalog Number: CFP23UB2-USB, BMS Part #: CFP23UB2-USB. DOI: 10.1109/CSCE60160.2023.00041. p. 228.

- Afsaneh Shams, Kyle Becker, Drew Becker, Soheyla Amirian, Khaled Rasheed "Evolutionary CNN-Based Architectures with Attention Mechanisms for Enhanced Image Classification", In Artificial Intelligence, Machine Learning, Convolutional Neural Networks, and Large Language Models. De Gruyter, part of the "Intelligent Computing" series. ISBN: 978-11-14400-3. Expected publication date: Early 2024.

- Sakher Alqaaidi, Elika Bozorgi, Afsaneh Shams, Krzysztof Kochut. "A Few-Shot Learning Focused Survey on Recent Named Entity Recognition and Relation Classification Models", Accepted at DATA 2024.

- Elika Bozorgi, Sakher Alqaaidi, Afsaneh Shams, Hamid Reza Arabnia, Krzysztof Kochut. "A Survey on Recent Random Walk-based Methods for Embedding Knowledge Graphs", (Submitted).

- Afsaneh Shams, Khaled Rasheed. "A Survey of Recent Evolutionary Algorithms", (In progress).

Awards:

- Outstanding Graduate TA Award, Computer Science Department, UGA, May 2023.

Certificates:

- Johns Hopkins Teaching Institute Workshop, May 27, 2022

Professional Services:

- Georgia Science & Engineering Fair (GSEF) 2023, Judge, Mar. 2023.
- Georgia Science & Engineering Fair (GSEF) 2024, Judge, Apr. 2024.

References:

- **Prof. Khaled Rasheed** (khaled@uga.edu)
  Professor of Computer Science
  Interim Executive Director, Institute of Artificial Intelligence

- **Dr. Manijeh Keshtgari** (M.keshtgari@uga.edu)
  Senior Lecturer of Computer Science

- **Dr. Yiheng Liang** (yiheng@uga.edu)
  Lecturer of Computer Science