SINA TABAKHI

@ stabakhi1@sheffield.ac.uk % https://sinatabakhi.github.io/ % https://scholar.google.com/citations?user=G6JSFp8AAAAJ&hl=en

nttps://github.com/SinaTabakhi

EDUCATION

• University of Sheffield, Sheffield, UK.

Nov 2021 - Present

Ph.D. in Computer Science.

Supervisor: Haiping Lu, Senior Lecturer.

• University of Kurdistan, Sanandaj, Iran.

Sep 2011 - Oct 2013

M.Sc. in Computer Engineering, Artificial Intelligence.

Thesis: New feature selection methods based on filter approach using ant colony optimization algorithm.

Supervisor: Parham Moradi, Associate Professor, and Fardin Akhlaghian Tab, Associate Professor.

GPA: 19.45/20; Rank: 1/20.

• Azad University-Sanandaj Branch, Sanandaj, Iran.

Sep 2007 - Sep 2011

B.Sc. in Information Technology Engineering.

Thesis: Review of filtering methods in image processing. Supervisor: Anvar Bahrampour, Assistant Professor.

GPA: 18.41/20; Rank: 1/80.

Research Interests

- Applications of Data Mining
- Machine Learning for Big Data
- Feature Selection
- Multi-Omics Data Integration
- Bioinformatics

PUBLICATIONS

Journal Papers

- 1. **Sina Tabakhi** and Parham Moradi, "Relevance-redundancy feature selection based on ant colony optimization", *Pattern Recognition* (**IF: 7.74**), Vol. 48, pp. 2798-2811, 2015, (**143 citations** as of 7 June 2022).
- 2. **Sina Tabakhi**, Ali Najafi, Reza Ranjbar, and Parham Moradi, "Gene selection for microarray data classification using a novel ant colony optimization", *Neurocomputing* (**IF: 5.719**), Vol. 168, pp. 1024-1036, 2015, (**126 citations** as of 7 June 2022).
- 3. **Sina Tabakhi**, Parham Moradi, and Fardin Akhlaghian, "An unsupervised feature selection algorithm based on ant colony optimization", *Engineering Applications of Artificial Intelligence* (**IF: 6.212**), Vol. 32, pp. 112-123, 2014, (**336 citations** as of 7 June 2022).

Honors and Awards

- Awarded the University Research Scholarship, University of Sheffield, UK, 2021.
- One of the **Top 5 Most Cited Papers** in Last 5 Years Published in Engineering Applications of Artificial Intelligence (Elsevier), 2019.
- Achieved Outstanding Contribution in Reviewing certificate, Pattern Recognition (Elsevier), 2018.
- Awarded Research Grant for highlighted academic activities, Iran's National Elites Foundation, Iran, 2016.
- Recognized as a **National Elite** by Iran's National Elites Foundation (The Professional National Foundation for Supporting Elites), Iran, 2014.
- Ranked 1st (highest GPA) among 20 graduate students, Department of Computer Engineering, University of Kurdistan, Iran, 2013.

- Honorable Mention in the 1st Amirkabir Artificial Intelligence Challenges (AAIC2012), Bank Fraud Detection League, Amirkabir University of Technology, Iran, 2012.
- Ranked 1st (highest GPA) among 80 undergraduate students, Department of Computer Engineering and IT, Azad University-Sanandaj Branch, Iran, 2011.
- Qualified as a Member of Young Researchers and Elites Club (First Center of Identification and Supporting Elites and Young Researchers of the University in Iran), Iran, 2010.
- Honorable Mention in the Asia Regional ACM Programming Contest, Tehran Site, Sharif University of Technology, Iran, 2008, 2009, and 2010.
- Ranked 1st in Internal ACM Programming Contest, Azad University-Sanandaj Branch, Iran, 2008 and 2009.

TEACHING EXPERIENCE

• Instructor, Design and Analysis of Algorithms, University of Kurdistan, Iran. Fall 2015

• Instructor, Data Structures, University of Kurdistan, Iran.

Spring 2015

• Instructor, Design and Analysis of Algorithms, Fanavari Abidar Institute, Iran.

Spring 2014

• Teaching Assistant, Design and Analysis of Algorithms, University of Kurdistan, Iran. Fall 2012 & Spring 2013

• Teaching Assistant, Advanced Programming in C++, Azad University-Sanandaj Branch, Iran.

Spring 2008

Work Experience

• Software Engineer at University of Sheffield, Sheffield, UK.	Jan 2022 – Present
• Senior Backend Developer at Phoenix, Tehran, Iran.	Dec 2019 - Oct 2021
• Senior Backend Developer at AloPeyk, Tehran, Iran.	May 2019 - Nov 2019

• Web Application Developer at Jiro Software Engineering Co., Sanandaj, Iran. Jan 2017 – May 2019

• Research Assistant at University of Kurdistan, Sanandaj, Iran.

Jun 2015 – Apr 2016

Research Assistant at Molecular Biology Research Center, Tehran, Iran.

Jul 2014 – May 2015

• Internship at Rayan Ravesh Company, Sanandaj, Iran. Mar 2011 – Jun 2011

Research Projects

• Universal Feature Selection Tool (UniFeat) (https://unifeat.github.io/) with Parham Moradi

Universal Feature Selection Tool (UniFeat) is an open-source tool, developed completely in Java, for performing feature selection process in different areas of research. UniFeat provides a set of well-known and state-of-the-art feature selection methods within the significant auxiliary tools, including performance evaluation criteria, visual displays,

statistical analysis, and reduced datasets to compare the performance of feature selection methods.

• Onco Gene Selector

Onco Gene Selector is Java-based software for gene selection in microarray data using machine learning techniques.

Memberships

• IEEE student member.	since 2012
• Iran's National Elites Foundation.	2014-2021
• Exceptional Talents Office of the University of Kurdistan.	2012-2013
• Young Researchers and Elites Club.	2010-2014

SERVICE

• Reviewer in Pattern Recognition Journal (Elsevier).

TECHNICAL SKILLS

• Programming Languages:

- Proficient in C#, Java.
- Worked with Python, C/C++.

• Web Programming:

- Experienced in ASP.NET.
- Familiar with HTML, CSS, Javascript.

• Databases:

- Experienced in SQL server.
- Worked with MySQL.

• Operating Systems:

- Microsoft Windows.
- Familiar with Linux (Ubuntu).

• IDE:

- Microsoft Visual Studio, NetBeans, Eclipse, PyCharm.
- Version Controls:
 - Git.

LANGUAGES

• English: Fluent (IELTS Academic Score: 6.5)

Kurdish: Native Persian: Native

References

- 1. Haiping Lu, Senior Lecturer, Department of Computer Science, University of Sheffield, UK (E-mail: h.lu@sheffield.ac.uk, Homepage: https://haipinglu.github.io/).
- 2. Parham Moradi, Associate Professor, Department of Computer Engineering, University of Kurdistan, Iran (E-mail: p.moradi@uok.ac.ir, Homepage: https://research.uok.ac.ir/~pmoradi/en/).
- 3. Fardin Akhlaghian Tab, Associate Professor, Department of Computer Engineering, University of Kurdistan, Iran (E-mail: f.akhlaghian@uok.ac.ir, Homepage: https://research.uok.ac.ir/~fakhlaghian/en/).