Dr. Polla Fattah

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I am working in the field of AI, ML, Deep Learning and Data Mining. I strive to harness the power of computation to further advance our understanding of the nature of thinking and processing information. Furthermore, I am trying to develop algorithms that solve hard problems of automating and extracting information from data. My goal is to use these researches to further develop my society and our understanding for the science and its implications.

Education

PhD: Data Mining and Machine Learning

Dissertation: Optimizing Rule-based Classification According to Items' Behaviour in Temporal Data Awarding Body: Compute Science, University of Nottingham. Study Years: 2012-2018.

IT: Linux Server Administration

Final Project: Crating virtual servers that are essential for running a university Awarding Body: Computer Science (Informatik), Technical University of Berlin. Study Years: 2010-2010.

MSc: Information Technology

Thesis: Design and Implementation of a Proposed Technique for Association Rule Mining Awarding Body: Electrical Engineering Dept, Salahaddin University-Erbil. Study Years: 2000-2008.

BSc: Software Engineering

Graduation Project: Kurdish Chat server/Client using Java Awarding Body: Software Engineering Dept., Salahaddin University-Erbil. Study Years: 2000-2004.

Diploma: Scientific Studies

Major: Scientific Studies Awarding Body: Kurdistan High School–Hawler, . Study Years: 1996-2000.

Teaching

Distributed Database(2024-Current): Salahaddin University-Erbil, Software Engineering Dept.

Advance Database(2018-Current): Salahaddin University-Erbil, Software Engineering Dept.

Advance Programming(2019-Current): Salahaddin University-Erbil, Software Engineering Dept.

Advanced Database(2018-Current): Salahaddin University-Erbil, Software Engineering Dept.

Data Mining(2020): Salahaddin University-Erbil, Software Engineering Dept.

Engineering Analysis(2019): Salahaddin University-Erbil, Software Engineering Dept.

Data Structure(2019-2020): Salahaddin University-Erbil, Software Engineering Dept.

Distributed Systems(2019): Tishk International University, Department of Computer Engineering

HCI(2019): University of Kurdistan - Hawler, Computer Engineering Dept.

Database(2009-2012): Salahaddin University-Erbil, Software Engineering Dept.

Linux(2018-2019): Tishk International University, Computer Science Dept.

Artificial Intelligence(2018): Tishk International University, Computer Engineering Dept

Operating Systems(2019): Koya University, Computer Engineering Dept.

Software Engineering(2018-2020): Salahaddin University-Erbil, Electrical Engineering Dept.

Computer Vision(2018-2020): University of Kurdistan Hewlêr, Computer Engineering Dept.

Introduction to Programming(2010-2012): Salahaddin University-Erbil, Electrical Engineering Dept.

OOP(2010-2012): Salahaddin University-Erbil, Software Engineering Dept.

Computer Applications(2009-2012): Salahaddin University-Erbil, Electrical Engineering Dept.

Internet Technology(2009-2011): Koya University, Computer Engineering Dept.

Honours & Awards

- **2022:** Thanks Letter from Ministry of Higher Education and Scientific Research for accomplishments in a committee for investigating the preparation of Gasha institute for establishing a new department for computer science.
- **2022:** Appreciation Letter from the president of Salahaddin University-Erbil for excellence in teaching and research activities.
- **2021:** Appreciation Certificate from the Minister of Higher Education, KRG for excellence of work in multiple committees at the ministry.
- 2021: Appreciation Letter from the Dean of the Engineering College for excellence in teaching and research activities.
- 2020: Thanks Letter from the president of Salahaddin University-Erbil for successful online teaching
- **2020:** Appreciation Letter from the Minister of Higher Education, for continuing the work of the University at the Corona times
- 2019: Appreciation Letter from the president of Salahaddin University-Erbil for excellence teaching and research

at the University

2015: Appreciation Letter from the former Minister of Higher Education, KRG for successful managing of the Nottingham University's Kurdish Conference

2012: Appreciation Certificate for Excellence at administrating the Salahaddin University-Erbil's website and IT infrastructure.

2012: KRG's scholarship award for PhD degree.

2010: Grant for Training in IT Administration at TU Berlin

2006: Study abroad scholarship at the University of Uppsala

2005: Ranked second on BSc Graduate competition at the level of the Salahaddin University-Erbil

Publications

- Rebin M. Ahmed, Tarik A. Rashid, Polla Fattah, Abeer Alsadoon, Nebojsa Bacanin, Seyedali Mirjalili, S. Vimal, Amit Chhabra; `Kurdish Handwritten character recognition using deep learning techniques`; Gene Expression Patterns; 2022-12-01
- Rebin Ahmed, Tarik Rashid, Polla Fatah, Abeer Alsadoon, Seyedali Mirjaliligh; `An Extensive Dataset of Handwritten Central Kurdish Isolated Characters`; Data in Brief; 2021-12-01
- Danial A. Muhammed, Tarik A. Rashid, Abeer Alsadoon, Nebojsa Bacanin, Polla Fattah, Mokhtar Mohammadi and Indradip Banerjee; `An Improved Simulation Model for Pedestrian Crowd Evacuation`; MDPI; 2020-12-01
- Chnoor M Rahman, Tarik A Rashid, Abeer Alsadoon, Nebojsa Bacanin, Polla Fattah; `A Survey on Dragonfly Algorithm and Its Applications in Engineering`; Evolutionary Intelligence; 2020-02-19
- Ahmed S Shamsaldin, Polla Fattah, Tarik A Rashid, Nawzad K Al-Salihi; `A study of the convolutional neural networks applications`; 2019-01-01
- Agha, Rawan A. Al Rashid, Muhammed N. Sefer, and Polla Fattah; `A Comprehensive Study on Sign Languages Recognition Systems Using (SVM, KNN, CNN and ANN)`; DATAS; 2018-10-01
- Ari M. Saeed, Tarik A. Rashid, Arazo M. Mustafa, Polla Fattah, Birzo Ismaels; `Improving Kurdish Web Mining through Tree Data Structure and Porter' Stemmer Algorithms`; UKH Journal of Science and Engineering; 2018-06-30
- Tarik Rashid, Polla Fattah, Delan K. Awla; `Using accuracy measure for improving the training of LSTM with metaheuristic algorithms`; Procedia Computer Science; 2018-01-01
- Polla Fattah, Uwe Aickelin, Christian Wagner; `Measuring behavioural change of players in public goods game`; 2016-09-21
- Polla Fattah, Uwe Aickelin, Christian Wagner; `Optimising Rule-Based Classification in Temporal Data`; ZANCO Journal of Pure and Applied Sciences; 2016-07-20
- Ari M Saeed, Tarik A Rashid, Arazo M Mustafa, Polla Fattah, Birzo Ismael; `Improving Kurdish Web Mining through Tree Data Structure and Porter's Stemmer Algorithms`; UKH Journal of Science and Engineering; 48-54; 2016-01-01
- Polla Fatah, Ibrahim Hamarash; `Optimization of Association Rule Mining`; Internet Technologies and

Applications (ITA); 2015-09-08

Ihab Ahmed Najm, Nayif Mohammed Hammash, Mahamod Ismail, Polla Fatah; `Web Based Application Visualization for Comprehensive Data Structures`; Journal of Theoretical and Applied Information Technology; 2015-07-20

Polla Fattah; `Measuring Micro Changes over Time in Clustering`; IMA Group Annual Seminar; 2014-12-12

Fattah, Polla, Uwe Aickelin, and Christian Wagner; `Clustering Human Behaviour in Public Good Experiment`; 2013-09-23



2018-Now: Lecturer at Salahaddin University-Erbil

2018-2020: Visiting Lecturer at Tishk International University

2018-2020: Visiting Lecturer at University of Kurdistan Hewlêr

2012-2016: Teaching Assistant at University of Nottingham

2009-2010: Visiting Lecturer at Koya University

2009-2012: Assistant Lecturer at Salahaddin University-Erbil

2004-2006: Software Engineer at Salahaddin University-Erbil

Academic Experiences

- Member of Scientific Committee: As the member of department's scientific committee, I have greatly involved in the decision making process for our department at the Salahaddin University-Erbil. The timing was especially an important as we were shifting from annual based system to the Bologna system. I have a noticeable influence on shaping the curriculum of the new system as well as carrying out other regular tasks of the committee.
- Member of Disciplinary Committee: As a member of this committee, I was responsible of resolving conflicts between students, students and lecturers and deliver the right disciplinary actions against students if needed according to the regulations of the university.
- Head of Examination Committee: For the year 2019-2020 I was the head of Examination Committee at the department of software engineering. I was responsible of exam scheduling coordination between the students, lecturers and other committee members. I also was responsible of publishing exam results and making sure to follow the universities regulations.
- Head of QA: I have held the position department's head of Quality assurance for many years. This gave me a great experience with the rules and regulations of the University and enabled me to help other colleagues to develop better research tracks and teaching curriculum for their subjects
- Publication: Well publication is not my best suite none the less I have my good share of it as it keeps the research alive and introduce my work to the scientific community.
- **Research:** I have done many research projects as researches are the most interesting part of the academy life which helps us to solve real life problems.
- Supervision: I have supervised many students with their BSc graduation project and MSc projects with great success. Many of them got distinction grades and awards wof their work

Lab Work: As I am working in bushiness too so that I have a very good experience with helping students with practical work.

Teaching: I have picked up a very good style of teaching through the years and having many courses about teaching to improve my style as much as possible.