

Muhammad Sulaman

Ph.D. Scholar in Computer Science
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EDUCATION

- **Nanjing University of Aeronautics and Astronautics** Nanjing, China
Master of Science in Computer Science and Technology; Percentage: 87% Sept. 2014 – March 2017
- **Bahauddin Zakariya University** Multan, Pakistan
Bachelor of Science in Information Technology; GPA: 3.36/4.00 Sept. 2009 – July. 2013

EXPERIENCE

- **University of Haut Alsace** Mulhouse, France
Ph.D Scholar at IRIMAS, Ensisa Oct 2021 - present
 - **Research Direction:** Machine Learning, Metaheuristics, Operations Research, Computational Intelligence
- **Cyber-Reality Innovation Center** Nanjing, China
C++ Software Development Engineer May 2020 - August 2021
 - **Projects:**
 - *Asset Management System
 - *Multi-Feature LED Bit Detection Algorithm
 - *Feature Detection and Matching Algorithm for Printed Circuit Board (PCB) Inspection
- **Country Garden Holdings** Foshan, China
Senior Software Development Engineer Sept. 2018 - Mar. 2020
 - **ASP.Net Software Development:** Worked on Business process modules of company's Core Sales management system. My responsibilities include researching, designing, developing and implementing new and existing modules.
 - **Overseas System Operation and Maintenance:** Communicate with overseas colleagues and process their technical work orders.
 - **Projects:**
 - *Online Learning Document Management System (ASP.Net)
 - *Application Version Management System (ASP.Net)
 - *China Commercial Bank Online Mortgage Application Management System (ASP.Net)
- **College of Computer Science and Technology, NUAA** Nanjing, China
Teaching Assistant Sept. 2016 - March 2017
 - **C-Programming Language:** Worked as a teaching assistant for a couple of courses which was taught to the international students at NUAA.
- **College of Computer Science and Technology, NUAA** Nanjing, China
Research Assistant Sept. 2014 - March 2017
 - **Computational Intelligence Laboratory:** I have been working on a number of multiobjective optimization and operational research projects such as Ready-mixed Concrete Delivery Problem, Travelling Salesman Problem and Software Next Release Problem.
- **EduSoft System Solutions** Multan, Pakistan
Software Engineer Sept. 2013 - Sept. 2014
 - **Transport Management System:** Using C# as a development language with "Microsoft SQL Server" as a database development platform, desktop client research and development work.
 - **School management System:** Using ASP.Net as development language with "MVC" framework for Web application development. I was familiar with HTML/CSS and gained some knowledge on javascript.
- **EduSoft System Solutions** Multan, Pakistan
Intern As a Software Developer Jul 2013 - Sept. 2013

PUBLICATIONS

1. M. Sulaman, M. Golabi, M. Essaid, J. Lepagnot, M. Bréviliers, L. Idoumghar. Surrogate-assisted metaheuristics for the facility location problem with distributed demands on network edges. *Computers & Industrial Engineering* (2024).
2. M. Sulaman, M. Golabi, M. Essaid, M. Bréviliers, J. Lepagnot, L. Idoumghar. Random Forest Assisted Differential Evolution for Multi-server Congested p -median Problem. 35th International Conference on Tools with Artificial Intelligence (ICTAI) Atlanta, USA 2023.
3. M. Golabi, M. Essaid, M. Sulaman, L. Idoumghar. Extreme Learning Machine-based Genetic Algorithm for the facility location problem with distributed demands on network edges. IEEE Congress on Evolutionary Computation (CEC), Chicago, USA 2023.
4. M. Sulaman, M. Golabi, M. Bréviliers, J. Lepagnot, L. Idoumghar. A comparative study of newly developed metaheuristics for the discrete uncapacitated p -median problem. 8th International Conference on Control, Decision and Information Technologies (CoDIT) Istanbul, Turkey 2022.
5. M. Sulaman, X. Cai and M. Misir. Simulated Annealing with a Time-slot Heuristic for Ready-mix Concrete Delivery. The 11th International Conference on Simulated Evolution and Learning, Shenzhen, China 2017
6. C. Zhu, X. Cai, Z. Fan and M. Sulaman. A two-phase many-objective evolutionary algorithm with penalty based adjustment for reference lines, IEEE Congress on Evolutionary Computation (CEC), Vancouver, BC, 2016, pp. 2161-2168, Vancouver, BC, Canada 2016.
7. C. Xia, X. Cai, Z. Fan, M. Sulaman. Reference line guided pareto local search for bi-objective traveling salesman problem. 2017 IEEE International Conference on Computational Science and Engineering (CSE) and IEEE International Conference on Embedded and Ubiquitous Computing (EUC), Guangzhou, China 2017.
8. W. Sun, X. Cai, C. Xia, M. Sulaman, Z. Fan and M. Misir. Greedy Based Pareto Local Search for Bi-objective Robust Airport Gate Assignment Problem, The 11th International Conference on Simulated Evolution and Learning, Shenzhen, China 2017.
9. H. Sun, X. Cai, M. Sulaman and Z. Fan and. An Evolutionary Many-Objective Optimization Algorithm Based on Coverage and Cache Strategy, International Conference on Industrial Informatics - Computing Technology, Intelligent Technology, Industrial Information Integration, 2017.

INTEREST

Multi-objective Optimization, Evolutionary Algorithms, Computational Intelligence, Meta-heuristics and Machine Learning. Operations Research, Continuous and Combinatorial Optimisation.

INVITED / TALKS

July. 2023: Speaker, International Conference on Control, Decision and Information Technologies (CoDIT)
Nov. 2016: Program host, First International Academic Conference for Graduated 2016, NUAA, Nanjing.
July. 2017: Speaker, The 11th International Conference on Simulated Evolution and Learning, 2017 Shenzhen.
Oct. 2017: Program host, Second International Academic Conference for Graduated 2017, NUAA, Nanjing.

AWARDS & HONOURS

1. Qualified for Fully Funded Chinese Government Scholarship for Masters
2. Project funding for doctoral research at ENSISA France
3. Class leader elected by students

PROJECTS

- **Hybrid Heuristic for Solving Ready-mixed Concrete Delivery Problem:** A Simulated annealing is combined with a time-slot heuristic (SA-TH) for solving the Concrete Delivery problem. This algorithm is coded by using Java.
- **Algorithm for Software Next Release Problem:** This Algorithm is designed for solving the Multi-objective Software Next Release Problem using Matlab.
- **Evolutionary Algorithm for Solving Multi-objective Algorithm for Solving MTSP:** This is algorithm is designed for solving the Multi-objective Travelling Salesman Problem. It is coded by using C++ programming language.

SKILLS

Programming: Python, C/C++, Matlab

Web Technologies: HTML (CSS), JScript, PHP

Database Systems: Oracle, Ms/MySQL

MEMBERSHIP

Member, the European Chapter on Metaheuristics (EU/ME)

Member, International Student Association of NUAA

Member, Overclocked Society, BZU

Member, NUAA Cultural Exchange

SOCIAL ACTIVITIES

Charity Event 2017 - Jiangsu Children Welfare Foundation: In cooperation with "Jiangsu Children Welfare Foundation", we have organized charity and fund-raising event to raise fund and help with the educational expenses of poor children living in rural areas of Jiangsu and Anhui provinces.

Volunteering Project to Visit the Disabled Senior Citizens - China Council of Lions: Together with the volunteers of "China Council of Lions" and medical team, we have been to a disabled citizens' homes with the medical staff do medical checkup of the disabled senior citizens, to give them some health instructions and to do some physical exercise with them.

Foreign Volunteer Teacher - Migrant Children We-care (MCWC) 2017: Our team members were appointed as foreign volunteer teachers in the MCWC-2017. Our foreign volunteer teacher went to different migrant schools and teach the migrant kids.

PERSONAL

Languages: Urdu (Native), English (Advanced), Chinese (Elementary), French (Elementary)