



OTTO VON GUERICKE
UNIVERSITÄT
MAGDEBURG

MATH

FAKULTÄT FÜR
MATHEMATIK

Publikationsbericht 2024

Institut für Mathematische Optimierung

INSTITUT FÜR MATHEMATISCHE OPTIMIERUNG

1. LEITUNG

Prof. Dr. Volker Kaibel (geschäftsführender Leiter bis 30.09.2024)

Prof. Dr. Sebastian Sager (geschäftsführender Leiter ab 01.10.2024)

2. VERÖFFENTLICHUNGEN

BEGUTACHTETE ZEITSCHRIFTENAUFsätze

Aggarwal, Sonam; Gupta, Isha; Kumar, Ashok; Kautish, Sandeep; Almazyad, Abdulaziz S.; Wagdy Mohamed, Ali; Werner, Frank; Shokouhifar, Mohammad

GastroFuse-Net - an ensemble deep learning framework designed for gastrointestinal abnormality detection in endoscopic images

Mathematical biosciences and engineering - Springfield, Mo. : Inst., Bd. 21 (2024), Heft 8, S. 6847-6869

Conforti, Michele; Kaibel, Volker

Steiner cut dominants

Mathematics of operations research - Hanover, Md. : INFORMS . - 2024, Heft \$p ;

[Online first]

[Imp.fact.: 1.8]

Elidrissi, Abdelhak; Benmansour, Rachid; Hasani, Keramat; Werner, Frank

Minimizing the makespan on two parallel machines with a common server in charge of loading and unloading operations

Computers & operations research - Amsterdam [u.a.]: Elsevier, Bd. 167 (2024), S. 1-20, Artikel 106638, insges. 20 S.

[Imp.fact.: 4.6]

Falahah, Ibraheem Abu; Al-Baik, Osama; Alomari, Saleh; Bektemyssova, Gulnara; Gochhait, Saikat; Leonova, Irina; Malik, Om Parkash; Werner, Frank; Dehgani, Mohammad

Fripped lizard optimization - a novel bio-inspired optimizer for solving engineering applications

Computers, materials & continua - Encino, Calif. : Tech Science Press, Bd. 79 (2024), Heft 3, S. 3631-3678

Gafarov, Evgeny R.; Werner, Frank

Connected and autonomous vehicle scheduling problems - some models and algorithms

Algorithms - Basel : MDPI, Bd. 17 (2024), Heft 9, Artikel 421, insges. 11 S.

[Imp.fact.: 1.8]

García-Mata, Carmen L.; Burtseva, Larysa; Werner, Frank

Scheduling of automated wet-etch stations with one robot in semiconductor manufacturing via constraint answer set programming

Processes - Basel : MDPI, Bd. 12 (2024), Heft 7, insges. 21 S.

[Imp.fact.: 2.8]

Hamadneh, Tareq; Batiha, Belal; Al-Baik, Osama; Bektemyssova, Gulnara; Montazeri, Zeinab; Werner, Frank; Dhiman, Gaurav; Dehgani, Mohammad; Eguchi, Kei

Sales training based optimization - a new human-inspired metaheuristic approach for supply chain management

International journal of intelligent engineering & systems - Open Academic Journals Index, Bd. 17 (2024), Heft 6, S. 1325-1334

Hamadneh, Tareq; Batiha, Belal; Alsayed, Omar; Werner, Frank; Monrazeri, Zeinab; Dehgani, Mohammad; Eguchi, Kei

Using the novel wolverine optimization algorithm for solving engineering applications

Computer modeling in engineering & sciences - Henderson, Nevada : Tech Science Press . - 2024, insges. 71 S.

;

[Online first]

[Imp.fact.: 2.2]

Hamadneh, Tareq; Batiha, Belal; Werner, Frank; Montazeri, Zeinab; Dehghani, Mohammad; Bektemyssova, Gulnara; Eguchi, Kei

Fossa optimization algorithm - a new bio-inspired metaheuristic algorithm for engineering applications

International journal of intelligent engineering & Systems - The Intelligent Networks and Systems Society, Bd. 17 (2024), Heft 5, S. 1038-1047

Hamadneh, Tareq; Kaabneh, Khalid; Abu Falahah, Ibraheem; Bektemyssova, Gulnara; Shaikemelev, Galymzhan; Umutkulov, Dauren; Omarov, Sayan; Monrazeri, Zeinab; Werner, Frank; Dehghani, Mohammad

Magnificent frigatebird optimization - a new bio-inspired metaheuristic approach for solving optimization problems

Computers, materials & continua - Encino, Calif. : Tech Science Press . - 2024, insges. 21 S. ;

[Online first]

[Imp.fact.: 2.0]

Lazarev, Alexander A.; Werner, Frank; Lin, Bertrand M. T.

Special issue "Recent Advances of Discrete Optimization and Scheduling"

Mathematics - Basel : MDPI, Bd. 12 (2024), Heft 6, Artikel 793, insges. 3 S.

Martensen, Carl Julius; Plate, Christoph; Sager, Sebastian

DynamicOED.jl - a Julia package for solving optimum experimental design problems

The journal of open source software - [Erscheinungsort nicht ermittelbar]: [Verlag nicht ermittelbar], Bd. 9 (2024), Heft 98, insges. 5 S.

Plate, Christoph; Sager, Sebastian; Stoll, Martin; Tetschke, Manuel

Second-order partial outer convexification for switched dynamical systems

IEEE transactions on automatic control / Institute of Electrical and Electronics Engineers - New York, NY : Institute of Electrical and Electronics Engineers, Bd. 69 (2024), Heft 7, S. 4643-4656

[Imp.fact.: 6.2]

Sager, Sebastian; Tetschke, Manuel; Zeile, Clemens

A numerical study of transformed mixed-integer optimal control problems

Mathematical programming computation - Berlin : Springer . - 2024, insges. 37 S. ;

[Online first]

[Imp.fact.: 4.3]

Shokouhifar, Mohammad; Hasanvand, Mohamad; Moharamkhani, Elaheh; Werner, Frank

Ensemble heuristic-metaheuristic feature fusion learning for heart disease diagnosis using tabular data

Algorithms - Basel : MDPI, Bd. 17 (2024), Heft 1, Artikel 34, insges. 23 S.

[Imp.fact.: 2.3]

Weber, Tobias; Kaibel, Volker; Sager, Sebastian

Source detection on graphs

Optimization and engineering - Dordrecht [u.a.]: Springer Science + Business Media B.V., Bd. 25 (2024), S. 1151-1177

[Imp.fact.: 2.0]

Werner, Frank

Special Issue: "2022 and 2023 Selected Papers from Algorithms' Editorial Board Members"

Algorithms - Basel : MDPI, Bd. 17 (2024), Heft 2, Artikel 65, insges. 4 S.

Werner, Frank

Special issue "Discrete optimization: Theory, algorithms and new applications"

AIMS mathematics - Springfield, MO : AIMS Press, Bd. 9 (2024), Heft 3, S. 6734-6737

[Imp.fact.: 2.2]

NICHT BEGUTACHTETE ZEITSCHRIFTENAUFsätze

Abu Falahah, Ibraheem; Al-Baik, Osama; Alomari, Saleh; Bektemyssova, Gulnara; Gochheit, Saikat; Leonova, Irina; Malik, Om Parkash; Werner, Frank; Dehghani, Mohammed

Frilled lizard optimization - a novel nature-inspired metaheuristic algorithm for solving optimization problems
Preprints.org - Basel : MDPI . - 2020, insges. 44 S.

García-Mata, Carmen L.; Burtseva, Larisa; Werner, Frank

Optimal scheduling for automated wetetch stations with one robot in semiconductor manufacturing via constraint answer set programming
Preprints.org - Basel : MDPI . - 2020, insges. 20 S.

Hamadneh, Tareq; Batiha, Belal; Werner, Frank; Eguchi, Kei; Montazeri, Zeinab; Dehghani, Mohammad

A completely different and innovative bio-inspired metaheuristic approach for effectively solving complex optimization problems across various domains
Preprints.org - Basel : MDPI . - 2024, insges. 42 S.

Werner, Frank; Ramirez-Fuentes, Johedan Kevin; Pacheco-Valencia, Victor

An overview of some single machine scheduling problems - polynomial algorithms, complexity and approximability
Arxiv - Ithaca, NY : Cornell University . - 2024, insges. 21 S.

BEGUTACHTETE BUCHBEITRäge

Kayvanfar, Vahid; Baziyad, Hamed; Sheikh, Shaya; Werner, Frank

A heuristic framework for assessing the efficiency of multi-branch banks under big data conditions
Business Analytics and Decision Making in Practice - Cham : Springer Nature Switzerland . - 2024, S. 271-293 ;
[Konferenz: International Conference on Business Analytics in Practice, ICBAP2024, Sharjah, Vereinigte Arabische Emirate, January 8-11, 2024]

Kukhareenko, Kirill; Sanità, Laura

On the number of degenerate simplex pivots
Integer Programming and Combinatorial Optimization , 1st ed. 2024. - Cham : Springer Nature Switzerland ;
Vygen, Jens, S. 252-264 - (Lecture notes in computer science; volume 14679) ;
[Konferenz: 25th International Conference on Integer Programming and Combinatorial Optimization, IPCO 2024, Wroclaw, Poland, July 3-5, 2024]

HERAUSGEBERSCHAFTEN

De Rango, Floriano [HerausgeberIn]; Werner, Frank [HerausgeberIn]; Wagner, Gerd [HerausgeberIn]

Proceedings of the 14th International Conference on Simulation and Modeling Methodologies, Technologies and Applications. Volume 1
Scitepress, 2024, 1 Online Ressource, ISBN: 978-989-758-708-5 Kongress: SIMULTECH 2024 14 Dijon, France 2024.07.10-12

Lazarev, Alexander A. [HerausgeberIn]; Werner, Frank [HerausgeberIn]; Lin, Bertrand M. T. [HerausgeberIn]

Recent advances of discrete optimization and scheduling
Basel: MDPI, 2024, 1 Online Ressource (IX, 202 Seiten), ISBN: 978-3-7258-0674-4 ;
[This book is a reprint of the Special Issue Recent Advances of Dis rete Optimization and Scheduling that was published in Mathematics]

Werner, Frank [HerausgeberIn]

2022 and 2023 Selected papers from algorithms editorial board members
Basel: MDPI, 2024, 1 Online Ressource (IX, 312 Seiten), ISBN: 978-3-7258-0642-3 ;
[This book is a reprint of the Special Issue 2022 and 2023 Selected Papers from Algorithms Editorial Board Members that was published in Algorithms]

Werner, Frank [HerausgeberIn]

Discrete optimization - theory, algorithms, and applications

Basel: MDPI, 2024, Online-Ressource, ISBN: 978-3-7258-1627-9 ;

[This book is a reprint of the Special Issue Discrete optimization: theory, algorithms, and applications that was published in Mathematics]

Werner, Frank [HerausgeberIn]

Mathematical methods for operations research problems

Basel: MDPI, 2024, Online-Ressource, ISBN: 978-3-7258-1625-5 ;

[This book is a reprint of the Special Issue Mathematical Methods for Operations Research Problems that was published in Mathematics]