# A new exact algorithm for the maximum-weight clique problem based on a heuristic vertex-coloring and a backtrack search

Kumlander, Deniss Proceedings of the Forth International Conference on Engineering Computational Technology 2004 / p. 137

### A practical algorithm for the maximum clique finding

**Kumlander, Deniss** Proceedings of the IADIS International Conference Applied Computing 2006: San Sebastian, Spain, 2006, February 25-28 2006 / p. 266-272 <a href="https://www.iadisportal.org/digital-library/a-practical-algorithm-for-the-maximum-clique-finding">https://www.iadisportal.org/digital-library/a-practical-algorithm-for-the-maximum-clique-finding</a>

#### A simple and efficient algorithm for the maximum clique finding reusing a heuristic vertex colouring

**Kumlander, Deniss** IADIS international journal on computer science and information system 2006 / 2, p. 32-49 <a href="https://www.iadisportal.org/ijcsis/papers/2006110203.pdf">https://www.iadisportal.org/ijcsis/papers/2006110203.pdf</a>

#### An approach for the maximum clique finding problem test tool software engineering

**Kumlander, Deniss** Proceedings of the IASTED International Conference on Software Engineering as part of the 25th IASTED International Multi-Conference on Applied Informatics: Innsbruck, Austria, 13-15.02.2007 2007 / p. 297-301

#### An extended comparison of the best known algorithms for finding the unweighted maximum clique

**Kumlander, Deniss** Modelling, computation and optimization in information systems and management sciences 2008 / p. 175-181 <a href="https://www.researchgate.net/publication/221451751\_An\_Extended\_Comparison\_of\_the\_Best\_Known\_Algorithms\_for\_Finding\_the\_Unweighted\_Maximum\_Clique">https://www.researchgate.net/publication/221451751\_An\_Extended\_Comparison\_of\_the\_Best\_Known\_Algorithms\_for\_Finding\_the\_Unweighted\_Maximum\_Clique</a>

#### Applying Al and incomplete solution principles to solve NP-hard problems in the real-time systems

 $\textbf{Kumlander, Deniss} \ \ \text{Proceedings of the WSEAS Conference}: 10 th \ \ \text{WSEAS Conference} \ \ \text{on Computers}: \ \ \text{Vouliagmeni, Athens, Greece, July 10-15, 2006 2006 / p. 807-811}$ 

https://www.researchgate.net/publication/242103446\_Applying\_Al\_and\_Incomplete\_Solution\_Principles\_to\_Solve\_NP-hard\_Problems in the Real-Time\_Systems

#### Artificial intelligence in the maximum clique finding problem applications

**Kumlander, Deniss** Proceedings of the WSEAS Conference: 7th WSEAS International Conference on Automation & Information (ICAl'06): Cavtat, Croatia, June 13-15, 2006 2006 / p. 132-137 <a href="https://www.researchgate.net/publication/234778320">https://www.researchgate.net/publication/234778320</a> Artificial intelligence in the maximum clique finding problem applications

#### Balancing supporting software development by dedicated infrastructure elements

**Kumlander, Deniss** Proceedings of the IASTED Conference on Software Engineering as part of the 26th IASTED International Multi-Conference on Applied Informatics: Innsbruck, Austria, February 12-14, 2008 2008 / p. 243-248

# Bridging gaps between requirements, expectations and delivered software in information systems development

Kumlander, Deniss WSEAS transactions on computers 2006 / 12, p. 2933-2939

https://www.researchgate.net/publication/290327110 Bridging gaps between requirements expectations and delivered software in information systems development

#### Bridging uncertainties gaps in software development projects

**Kumlander, Deniss** ICEIS 2008: Proceedings of the Tenth International Conference on Enterprise Information Systems. Vol ISAS-2, Information systems analysis and specification. Vol. 2 2008 / p. 240-245

# Collaborative software engineering of the life-critical systems

**Kumlander, Deniss** Proceedings of the WSEAS conference: 6th WSEAS International Conference on Software Engineering, Parallel and Distributed Systems (SEPADS'07): Corfu Island, Greece, February 16-19, 2007 2007 / p. 35-38

#### Communication gaps and requirements uncertainties in the information systems design

**Kumlander, Deniss** Proceedings of the WSEAS Conference : The 6th WSEAS International Conference on Applied Informatics and Communications : Elounda, Crete, Greece, 18-20.08.2006 2006 / p. 400-405 <a href="https://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=47EF002F94CE4D42B245976A485EDFED?doi=10.1.1.584.736&rep=rep1&type=pdf">https://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=47EF002F94CE4D42B245976A485EDFED?doi=10.1.1.584.736&rep=rep1&type=pdf</a>

# Comparing the best maximum clique finding algorithms, which are using heuristic vertex colouring

**Kumlander, Deniss** Proceedings of the WSEAS Conference: 10th WSEAS Conference on Computers: Vouliagmeni, Athens, Greece, July 10-15, 2006 2006 / p. 932-937 <a href="https://citeseerx.ist.psu.edu/document?">https://citeseerx.ist.psu.edu/document?</a> repid=rep1&type=pdf&doi=6a835c6002434a8e0985d850356794d9bc74879e

#### Context driven personalized e-learning environment provided as a state service

Kumlander, Deniss Technological developments in networking, education and automation 2010 / p. 43-48

#### Contextual semantic: a context-aware approach for semantic web based data extraction from scientific articles

Kumlander, Deniss Innovations in computing sciences and software engineering 2010 / p. 241-244

#### E-education as a state service to citizens of different ages

Kumlander, Deniss Technological developments in education and automation 2010 / p. 461-466

#### E-learning environment identification system : error injection and patterns dynamics

Kumlander, Deniss Innovations and advances in computer, information, systems sciences, and engineering 2013 / p. 917-924

# An experimental comparison of heuristic coloring algorithms in terms of found color classes on random graphs

**Kumlander, Deniss**; Kulitškov, Aleksei WCGO 2019: Optimization of Complex Systems: Theory, Models, Algorithms and Applications 2020 / p. 365-375 https://doi.org/10.1007/978-3-030-21803-4 37 Conference proceedings at Scopus Article at Scopus

#### Hybrid software engineering

Kumlander, Deniss WSEAS transactions on business and economics 2006 / 10, p. 686-691

#### Improving the maximum clique finding applications by using artificial intelligence principles

Kumlander, Deniss WSEAS transactions on computers 2006 / 8, p. 1726-1732

https://www.researchgate.net/publication/288446461\_Improving\_the\_maximum\_clique\_finding\_applications\_by\_using\_artificial\_intelligence\_principles

# Improving the maximum-weight clique algorithm for the dense graphs

 $\textbf{Kumlander, Deniss} \ \ \textbf{Proceedings of the WSEAS Conference}: 10 th \ \ \textbf{WSEAS Conference} \ on \ \ \textbf{Computers}: \ \ \textbf{Vouliagmeni, Athens, Greece, July 10-15, 2006 2006 / p. 938-943}$ 

# Incomplete solution approach for the maximum clique finding in the real-time systems

Kumlander, Deniss Proceedings of the IASTED International Conference on Artificial Intelligence and Applications 2006 / p. 75-79 <a href="https://www.researchgate.net/publication/221173835">https://www.researchgate.net/publication/221173835</a> Incomplete Solution Approach for the Maximum Clique Finding in the Real Time Systems

#### Key success factors in personnel motivating projects

**Kumlander, Deniss** Proceedings of the 7th WSEAS International Conference on Applied Informatics and Communication: Vouliagmeni, Athens, Greece, August 24-26, 2007 2007 / p. 202-207 <a href="https://citeseerx.ist.psu.edu/document?">https://citeseerx.ist.psu.edu/document?</a> <a href="mailto:repid=rep1&type=pdf&doi=2c83feee792ef9407179ab85adb45075dcb33478">https://citeseerx.ist.psu.edu/document?</a> <a href="mailto:repid=rep1&type=pdf&doi=2c83feee792ef9407179ab85adb45075dcb33478">https://citeseerx.ist.psu.edu/document?</a>

#### Migration of software projects' goals and expectations

**Kumlander, Deniss** Proceedings of the WSEAS Conference : 5th WSEAS Int Conf. on Data networks, Communications and Computers : DNCOCO'06 2006 / p. 184-187 <a href="https://dl.acm.org/doi/abs/10.5555/1974079.1974116">https://dl.acm.org/doi/abs/10.5555/1974079.1974116</a>

# Motivating company personnel by applying the semi-self-organized teams principle

**Kumlander, Deniss** Innovations in computing sciences and software engineering 2010 / p. 245-248 <a href="https://link.springer.com/chapter/10.1007/978-90-481-9112-3">https://link.springer.com/chapter/10.1007/978-90-481-9112-3</a> 41

# A new exact algorithm for the maximum-weight clique problem based on a heuristic vertex-coloring and a backtrack

**Kumlander, Deniss** Modelling, Computation and Optimization in Information Systems and Management Sciences : Metz, France 2004 / p. 202-208

# NP-hard graph problems' algorithms testing guidelines: artificial intelligence principles and testing as a service Kumlander, Deniss Advances in computer and information sciences and engineering 2008 / p. 114-118: ill

NP-hard graph problems' algorithms testing guidlines: artificial intelligence principles and testing as a service Kumlander, Deniss Innovative techniques in instruction technology, e-learning, e-assessment, and education 2008 / p. 112-116

#### On importance of a special sorting in the maximum-weight clique algorithm based on colour classes

Kumlander, Deniss Modelling, computation and optimization in information systems and management sciences 2008 / p. 165-174

# On optimizing payments clearance business process – an evolutional approach

**Kumlander, Deniss** Advances in computer science: proceedings of the 6th WSEAS European Computing Conference (ECC'12): Prague, Czech Republic, September 24-26, 2012 2012 / p. 505-510

# On places suitable for applying Al principles in NP-hard graph problem's algorithms

**Kumlander, Deniss** Proceedings of the IASTED Conference on Artificial Intelligence and Applications as part of the 25th IASTED International Multi-Conference on Applied Informatics: Innsbruck, Austria, 12-14.02.2007 2007 / p. 284-288

# On software design and development supporting requirements formulation

**Kumlander, Deniss** Proceedings of the WSEAS Conference : 10th WSEAS Conference on Computers : Vouliagmeni, Athens, Greece, July 10-15, 2006 2006 / p. 818-825 <a href="https://dl.acm.org/doi/abs/10.5555/1981848.1982001">https://dl.acm.org/doi/abs/10.5555/1981848.1982001</a>

#### On software projects affecting requirements by internal releases

Kumlander, Deniss WSEAS transactions on business and economics 2006 / 6, p. 492-497

#### On synergy of motivational projects and agile software development practices

Kumlander, Deniss Emerging trends in computing, informatics, systems sciences, and engineering 2013 / p. 487-497

# On using software engineering projects as an additional personnel motivating factor

Kumlander, Deniss WSEAS transactions on business and economics 2006 / 4, p. 261-267

### On verification of the software development process

**Kumlander, Deniss** Innovations and advances in computing, informatics, systems sciences, networking and engineering 2015 / p. 339-343 <a href="http://dx.doi.org/10.1007/978-3-319-06773-5">http://dx.doi.org/10.1007/978-3-319-06773-5</a> 45

#### Personnel motivating projects: reasons, implementation and risks

**Kumlander, Deniss** Proceedings of the WSEAS conference: 6th WSEAS International Conference on Software Engineering, Parallel and Distributed Systems (SEPADS'07): Corfu Island, Greece, February 16-19, 2007 2007 / p. 30-34

# Personnel motivating software reengineering

**Kumlander, Deniss** Proceedings of the WSEAS Conference : 10th WSEAS Conference on Computers : Vouliagmeni, Athens, Greece, July 10-15, 2006 2006 / p. 826-830

https://www.researchgate.net/publication/252013585\_Personnel\_Motivating\_Software\_Reengineering

#### Problems of optimization: an exact algorithm for binding a maximum clique optimized for the dense graphs

Kumlander, Deniss ISMP2003: Copenhagen, 2003: program and abstracts book 2003 / p. 114

# Problems of optimization : an exact algorithm for finding a maximum clique optimized for dense graphs

**Kumlander, Deniss** Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 2005 / 2, p. 79-86

# Product owner responsibilities in the project assurance process: bridging uncertainties gaps

**Kumlander, Deniss** Innovations and advances in computing, informatics, systems sciences, networking and engineering 2015 / p. 515-519 <a href="http://dx.doi.org/10.1007/978-3-319-06773-5\_69">http://dx.doi.org/10.1007/978-3-319-06773-5\_69</a>

# Providing a correct software design in an environment with some set of restrictions in a communication between product managers and designers

**Kumlander, Deniss** Proceedings of the Fourteenth International Conference on Information Systems Development: pre-conference 14-17 August 2005, Karlstad, Sweden 2005 / p. 1-11

# Providing a correct software design in an environment with some set of restrictions in a communication between product managers and designers

**Kumlander, Deniss** Advances in information systems development: bridging the gap between academia and industry. 1 2006 / p. 181-192 <a href="https://link.springer.com/chapter/10.1007/978-0-387-36402-5\_16">https://link.springer.com/chapter/10.1007/978-0-387-36402-5\_16</a>

# Real-time systems: incomplete solution approach for the maximum-weight clique problem

**Kumlander, Deniss** Proceedings of the IASTED International Conference on Artificial Intelligence and Applications : Innsbruck, Austria, February 11-13, 2008 2008 / p. 140-145

#### Reversed search maximum clique algorithm based on recoloring

**Kumlander, Deniss**; Porošin, Aleksandr WCGO 2019: Optimization of Complex Systems: Theory, Models, Algorithms and Applications 2020 / p. 458-467 <a href="https://doi.org/10.1007/978-3-030-21803-4\_46">https://doi.org/10.1007/978-3-030-21803-4\_46</a> <a href="https://doi.org/10.1007/978-3-030-21803-4\_46">https://doi.org/10.1007/978-3-030-21803-4\_46</a> <a href="https://doi.org/10.1007/978-3-030-21803-4\_46">Conference proceedings at Scopus</a> <a href="https://doi.org/10.1007/978-3-030-21803-4\_46">Article at Scopus</a>

# Self-organized teams: a contradictory technique to motivate personnel

**Kumlander, Deniss** Innovations and advances in computing, informatics, systems sciences, networking and engineering 2015 / p. 379-383 <a href="http://dx.doi.org/10.1007/978-3-319-06773-5">http://dx.doi.org/10.1007/978-3-319-06773-5</a> <a href="https://dx.doi.org/10.1007/978-3-319-06773-5">http://dx.doi.org/10.1007/978-3-319-06773-5</a> <a href="https://dx.doi.org/10.1007/978-3-319-06773-5">https://dx.doi.org/10.1007/978-3-319-06773-5</a> <a href="https://dx.doi.org/10.1007/978-3-319-0773-5">https://dx.doi.org/10.1007/978-3-319-06773-5</a> <a href="https://dx.doi.org/10.1007/978-3-319-0773-5">https://dx.doi.org/10.1007/978-3-319-0773-5</a> <a href="https://dx.doi.org/10.1007/978-3-319-0773-5">https://dx.doi.org/10.1007/978-3-319-0773-5</a> <a href="https://dx.doi.org/10.1007/978-3-319-0773-5">https://dx.doi.org/10.1007/978-3-319-0773-5</a> <a href="https://dx.doi.org/10.1007/978-3-319-0773-5">https://dx.doi.org/10.1007/978-3-319-0773-5</a> <a href="https://dx.doi.org/10.1007/978-3-319-0773-5">https://dx.doi.org/10.1007/978-3-319-0773-5</a> <a href="https://dx.doi.org/10.1007/978-3-319-0773-5"

#### Semi- and fully self-organised teams

**Kumlander, Deniss** Advanced techniques in computing sciences and software engineering 2010 / p. 257-261 <a href="https://ui.adsabs.harvard.edu/abs/2010atcs.book..257K/abstract">https://ui.adsabs.harvard.edu/abs/2010atcs.book..257K/abstract</a>

#### Semi-agile approach to software development process

Kumlander, Deniss Innovations and advances in computer, information, systems sciences, and engineering 2013 / p. 801-809

# Semi-agile Approach to Software Development Process [Electronic resource]

Kumlander, Deniss CISSE 2011 International joint conferences 2011 / [5 p.] [CD-ROM]

# Software design by uncertain requirements

**Kumlander, Deniss** Proceedings of the IASTED International Conference on Software Engineering 2006 / p. 224-229 <a href="https://www.researchgate.net/publication/220901409">https://www.researchgate.net/publication/220901409</a> Software Design By Uncertain Requirements

#### Some practical algorithms to solve the maximum clique problem

Kumlander, Deniss 2005 https://www.ester.ee/record=b2097511\*est

# Some practical payments clearance algorithms

Kumlander, Deniss Advanced techniques in computing sciences and software engineering 2010 / p. 307-312 : ill

#### Supporting software engineering

Kumlander, Deniss WSEAS transactions on business and economics 2006 / 4, p. 296-303

# The uncertainties management framework: eliminating uncertainties from the process

Kumlander, Deniss Information system development: improving enterprise communication 2014 / p. 473-485

# Towards a better infrastructure supporting the e-education as a state public service

**Kumlander, Deniss** New trends in networking, computing, e-learning, systems sciences, and engineering 2015 / p. 309-315 <a href="http://dx.doi.org/10.1007/978-3-319-06764-3\_38">http://dx.doi.org/10.1007/978-3-319-06764-3\_38</a>

Towards a new paradigm of software development: an ambassador driven process in distributed software companies **Kumlander**, **Deniss** Advanced techniques in computing sciences and software engineering 2010 / p. 487-490

#### Towards dependable software: researching work-flow gaps in the distributed organisation

**Kumlander, Deniss** Proceedings of the 7th WSEAS International Conference on Applied Informatics and Communication : Vouliagmeni, Athens, Greece, August 24-26, 2007 2007 / p. 208-212

#### Uncertainties management framework - foundational principles

**Kumlander, Deniss** ICEIS 2009 : proceedings of the 11th International Conference on Enterprise Information Systems : Milan, Italy, May 6-10, 2009 : Volume ISAS 2009 / p. 103-108 <a href="https://www.scitepress.org/Papers/2009/19714/19714.pdf">https://www.scitepress.org/Papers/2009/19714/19714.pdf</a>

# Uncertainty management framework elements - test based verification of the process

**Kumlander, Deniss** Advances in computer science: proceedings of the 6th WSEAS European Computing Conference (ECC'12): Prague, Czech Republic, September 24-26, 2012 2012 / p. 517-521

#### Using clinical decision support software in health insurance company

Konovalov, R.; Kumlander, Deniss Advanced techniques in computing sciences and software engineering 2010 / p. 223-226 : ill