

Papers published in international peer-reviewed international journals

1. Grbić Milana, Kartelj Aleksandar, Janković Savka, Matić Dragan and **Filipović Vladimir**, **Variable neighborhood search for partitioning sparse biological networks into the maximum edge-weighted k-plexes**, IEEE/ACM Transactions on Computational Biology and Bioinformatics, DOI 10.1109/TCBB.2019.2898189, 2019.
2. Matić Dragan, Kratica Jozef and **Filipović Vladimir**, **Variable Neighborhood Search for solving Bandwidth Coloring Problem**, Computer Science and Information Systems, Vol. 14, Iss. 2, pp. 309-327, 2017.
3. Dražić Zorica, Savić Aleksandar and **Filipović Vladimir**, **An integer linear formulation for the file transfer scheduling problem**, TOP, Vol. 22, Iss. 3, pp. 1062-1073, 2014.
4. **Filipović Vladimir**, Kartelj Aleksandar and Matić Dragan, **An electromagnetism metaheuristic for solving the Maximum Betweenness Problem**, Applied Soft Computing, Vol. 13, Iss. 2, pp. 1303–1313, 2013.
5. Kartelj Aleksandar, Mitić Nenad, **Filipović Vladimir** and Tošić Dušan, **Electromagnetism-like Algorithm for Support Vector Machine Parameter Tuning**, Soft Computing, Vol. 18, Iss. 10, pp. 1985-1998, 2013.
6. Savić Aleksandar, Kratica Jozef and **Filipović Vladimir**, **A New Nonlinear Model for the Two-Dimensional Rectangle Packing Problem**, Publications de l'Institut Mathématique, Vol. 93, Iss. 107, pp. 95-107, 2013.
7. Nikolić Zorana, Brajušković Goran, Savić Dušanka, Kojić Aleksandra, Vujović Vinka, Tomović Saša, Cerović Snežana, **Filipović Vladimir**, Mišljenović Đura and Romac Stanka, **Assessment of possible association between rs3787016 and prostate cancer risk in Serbian population**, International Journal of Clinical and Experimental Medicine, Vol. 6, No. 1, pp. 57-66, 2013.
8. Kratica Jozef, Kostić Tijana, Tošić Dušan, Dugošija Đorđe and **Filipović Vladimir**, **A genetic algorithm for the routing and carrier selection problem**, Computer Science and Information Systems – COMSIS, Vol. 9 No 1, pp. 49-62, 2012.
9. Lazović Bojana, Marić Miroslav, **Filipović Vladimir** and Savić Aleksandar, **An integer linear programming formulation and genetic algorithm for the maximum set splitting problem**, Publications de l'Institut Mathématique, Vol. 92, Iss. 106, pp. 25-34, 2012.
10. Đurić Brankica, Kratica Jozef, Tošić Dušan and **Filipović Vladimir**, **Solving the maximally balanced connected partition problem in graphs by using genetic algorithm**, Computing and Informatics, Vol. 27 No 3, pp. 341-354, 2008.
11. Kratica Jozef, Stanimirović Zorica, Tošić Dušan and **Filipović Vladimir**, **Two Genetic Algorithms for Solving the Uncapacitated Single Allocation p-Hub Median Problem**, European Journal of Operational Research – EJOR, 182, pp. 15-28, 2006.
12. Kratica Jozef, Stanimirović Zorica, Tošić Dušan and **Filipović Vladimir**, **Genetic Algorithm for Solving Uncapacitated Multiple Allocation Hub Location Problem**, Computing and Informatics, Vol. 24 No 4, pp. 415-426, 2005.
13. **Filipović Vladimir**, **Fine-grained Tournament Selection Operator in Genetic Algorithms**, Computers and Informatics, Vol. 22, No. 2, pp. 143-162, 2003.
14. Kratica Jozef, Tošić Dušan, **Filipović Vladimir** and Ljubić Ivana, **Solving the Simple Plant Location Problem by Genetic Algorithms**, RAIRO - Operations Research, Vol. 35, No. 1, pp. 127-142, 2001.

Chapters in books/monographic series

1. **Filipović Vladimir**, Kratica Jozef, Tošić Dušan and Dugošija Đorđe, **GA Inspired Heuristic for Uncapacitated Single Allocation Hub Location Problem**, Applications of Soft Computing - Advances in Soft Computing, Vol. 58/2009, pp. 149-158, Springer, 2009.
2. Kratica Jozef, Kojić Jelena, Tošić Dušan, **Filipović Vladimir** and Dugošija Đorđe, **Two Hybrid Genetic Algorithms for Solving the Super-Peer Selection Problem**, Applications of Soft Computing - Advances in Soft Computing, Vol. 58/2009, pp. 337-346, Springer, 2009.

3. Kratica Jozef, Tošić Dušan, **Filipović Vladimir** and Ljubić Ivana, **A Genetic Algorithm for the Uncapacitated Network Design Problem**, Soft Computing in Industry – Recent Applications, pp. 329-338, Springer, 2002.

Preprint papers

1. Kratica Jozef, **Filipović Vladimir** and Kartelj Aleksandar, **Edge metric dimension of some generalized Petersen graphs**, arXiv:1807.00580, 02.07.2018.

Invited lectures

1. **Filipović Vladimir**, **Optimization, classification and dimensionality reduction in biomedicine and bioinformatics**, First Congress of Molecular Biologists of Serbia with international participation - 1stCoMBoS, pp. 98, Belgrade, 2017. This paper is presented.

From international conferences, published in proceedings and journals

1. Grbić Milana, Kartelj Aleksandar, Matić Dragan and **Filipović Vladimir**, **Improving 1NN strategy for classification of some prokaryotic organisms**, Proceedings of the Belgrade Bioinformatic Conference (BelBI), pp. 43-54, Belgrade 2016.
2. Matić Dragan, Kratica Jozef, **Filipović Vladimir** and Dugošija Đorđe, Variable neighborhood search for Multiple Level Warehouse Layout Problem, **EURO Mini Conference XXVIII on Variable Neighbourhood Search**, Herceg Novi, Montenegro, 2012. This paper is presented.
3. **Filipović Vladimir**, Kratica Jozef, Savić Aleksandar and Dugošija Đorđe, **The modification of genetic algorithms for solving the balanced location problem**, ACM International Conference Proceeding Series - 5th Balkan Conference in Informatics BCI 2012, pp. 243-246, 2012.
4. Kartelj Aleksandar, **Filipović Vladimir** and Milutinović Veljko, **Novel approaches to automated personality classification: Ideas and their potentials**, Proceedings of the 35th International Convention MIPRO 2012, pp. 1017 - 1022, 2012.
5. Kratica Jozef, Kojić Jelena, Tošić Dušan, **Filipović Vladimir** and Dugošija Đorđe, Two Hybrid Genetic Algorithms for Solving the Super-Peer Selection Problem, **Online World Conference on Soft Computing in Industrial Applications, WSC 2008**. Presented paper is awarded with 'Best Paper Prize' award.
6. **Filipović Vladimir**, Kratica Jozef, Tošić Dušan and Dugošija Đorđe, GA Inspired Heuristic for Uncapacitated Single Allocation Hub Location Problem, **Online World Conference on Soft Computing in Industrial Applications, WSC 2008**. This paper is presented.
7. **Filipović Vladimir**, Tošić Dušan and Kratica Jozef, **Parallel Evolutionary Algorithm Web Service**, Proceedings of the XXX SYM-OP-IS 2003, pp. 292-295, Herceg Novi, 2003.
8. Kratica Jozef, Tošić Dušan, **Filipović Vladimir** and Ljubić Ivana, **Comparing Performances of Several Algorithms for Solving the Simple Plant Location Problem**, Proceedings of the 10th Congress of Yugoslav Mathematicians, Belgrade, Yugoslavia, pp. 337-341, 2001.
9. **Filipović Vladimir**, Tošić Dušan and Kratica Jozef, **Experimental Results in applying of Fine Grained Tournament Selection**, Proceedings of the 10th Congress of Yugoslav Mathematicians, Belgrade, Yugoslavia, pp. 331-336, 2001.
10. Kratica Jozef, Tošić Dušan, **Filipović Vladimir** and Ljubić Ivana, **Genetic Algorithm for Designing a Spread-Spectrum Radar Polyphase Code**, Proceedings of the 5th Online World Conference on Soft Computing in Industrial Applications WSC5, pp. 191-197, 2000.
11. **Filipović Vladimir**, Kratica Jozef, Tošić Dušan and Ljubić Ivana, **Fine Grained Tournament Selection for the Simple Plant Location Problem**, Proceedings of the 5th Online World Conference on Soft Computing in Industrial Applications WSC5, pp. 152-158, 2000.
12. Kratica Jozef, **Filipović Vladimir** and Tošić Dušan, **Solving of the uncapacitated warehouse location problem by SGA with ADD-heuristics**, Proceedings of the XVI ECPD International Conference on Material handling and warehousing, pp. 2.28-2.33, Belgrade, 1998.

13. **Filipović Vladimir**, Tošić Dušan, Urošević Dragan and Kratica Jozef, **General parallel algorithm to the solution of the geophysical inversion problem applied to the transputer system**, Proceedings of the VII Conference on Logic and Computer Science LIRA '97 - Separate Volume, pp. A3-A8, Novi Sad, Yugoslavia, 1997.
14. Kratica Jozef, **Filipović Vladimir**, Šešum Vesna and Tošić Dušan, **Solving of the uncapacitated warehouse location problem using a simple genetic algorithm**, Proceedings of the XIV ECPD International Conference on Material handling and warehousing, pp. 3.33-3.37, Belgrade, 1996.

Colloquiums, conferences and workshops

1. **Filipović Vladimir**, Partitioning Sparse Biological Networks into the Maximum Edge-Weighted k-Plexes, **Seminary of the Department for Informational Systems and Communications**, University Milano-Bicocca, Milano, 2018. Here is an invitational **poster**.
2. **Filipović Vladimir**, Solving Maximum Betweenness Problem with Electromagnetism Metaheuristic, **Computer Science and Applied Mathematics Colloquium**, Mathematical institute of the Serbian Academy of Sciences and Arts, Belgrade, 2017. This is the **presentation**.
3. Grbić Milana, Kartelj Aleksandar, Matić Dragan and **Filipović Vladimir**, **Partitoning biological networks in k-plex subnetworks with maximum edge weights**, 3rd Symposium on non globular proteins, Košice, Slovakia, 2016.
4. Šandrih Branislava and **Filipović Vladimir**, **Introduction to Internet and Web technologies - How to Structure the Course**, 16 is the **presentation**.th Workshop - Software Engineering Education and Reverse Engineering, DAAD, Jahorina, 2016. This is the **presentation**.
5. Aljoša Šljuka and **Filipović Vladimir**, **Pristup znanja u konstrukciji veb aplikacija kao spoj bogatih klijenata i servisa**, Sixth Mathematical Conference of Republika Srpska, Pale, 2016. This is the **presentation**.
6. **Filipović Vladimir**, **Object oriented programming - effects of the implemented course modifications**, 15th Workshop - Software Engineering Education and Reverse Engineering, DAAD, Bohinj, 2015. This is the **presentation**.
7. **Filipović Vladimir**, **Using JavaFX in the First OO Programming Course**, 13th Workshop - Software Engineering Education and Reverse Engineering, DAAD, Bansko, Bugarska, 2013. This is the **presentation**.
8. **Filipović Vladimir**, **Using open source software and SCRUM methodology in SE course at Faculty of Mathematics in Belgrade**, 12th Workshop - Software Engineering Education and Reverse Engineering, DAAD, Opatija, 2012. This is the **presentation**.
9. **Filipović Vladimir**, **Experiences with ALM tools in Software Engineering course**, 11th Workshop - Software Engineering Education and Reverse Engineering, DAAD, Ohrid, 2011. This is the **presentation**.
10. **Filipović Vladimir** and Pajović Milojko, **Integrated Informational System of Bar Municipality - eGovernment of Bar Municipality**, Planary presentation at Scientific Symposium Informational Technologies - IT 2010, Žabljak, Montenegro, 2010. This is the **presentation**.
11. **Filipović Vladimir**, **Experiences in defining projects for the course Software development at Faculty of Mathematics in Belgrade**, 10th Workshop - Software Engineering Education and Reverse Engineering, DAAD, Ivanjica, 2010. This is the **presentation**.
12. Stanimirović Zorica, Kratica Jozef, Tošić Dušan and **Filipović Vladimir**, **A Survey of Genetic Algorithm Approaches for Solving Hub Location Problems**, The International Workshop on Operational Research Conference, IWOR 2008, Madrid, Spain, 2008. This **paper** is presented.
13. **Filipović Vladimir**, **GA Inspired Heuristic for Uncapacitated Single Allocation Hub Location Problem**, **Mathematics Colloquium**, Mathematical institute of the Serbian Academy of Sciences and Arts, Belgrade, 2006.

14. **Filipović Vladimir**, Poboljšanje operatora turnirske selekcije kod Genetskih algoritama, **Computer Science and Applied Mathematics Colloquium**, Mathematical institute of the Serbian Academy of Sciences and Arts, Belgrade, 2000.

Monograph

1. Stanimirović Zorica, Kratica Jozef, **Filipović Vladimir** and Tošić Dušan, Evolutionary approach for Solving Hub Location Problems (in Serbian), Zavod za udžbenike, Belgrade, 2011.

PhD thesis

- **Filipović Vladimir**, **Selection and Migration Operators and Web Services in Parallel Evolutionary Algorithms** (in Serbian), Faculty of Mathematics, University of Belgrade, June 2006.

MSc thesis

- **Filipović Vladimir**, Proposition for Improvement Tournament Selection Operator in Genetic Algorithms (in Serbian), Faculty of Mathematics, University of Belgrade, Januar 1998.

Papers published in national peer-reviewed journals

1. Šandrih Branislava, **Filipović Vladimir**, Kartelj Aleksandar and Malkov Saša, **Distributed Computing Among Independent Web Browsers Applied to Text and Image Processing**, Review of the National Center for Digitization, Vol. 31, pp. 30-39, 2017. pp. 20, Belgrade, 2017.
2. Šandrih Branislava, Tošić Dušan and **Filipović Vladimir**, **Towards Efficient and Unified XML/JSON Conversion - a New Conversion Method**, Transactions on Internet Research (TIR), Vol. 13, No. 1, pp. 58–64, 2017.
3. **Filipović Vladimir**, **Optimization, classification and dimensionality reduction in biomedicine and bioinformatics**, Biologia Serbica, Vol. 39, No. 1, pp. 83-98, 2017.
4. **Filipović Vladimir**, Zagarčanin Mladen, Tošić Dušan and Stanišić Sanja, **Digitalization in the Bar County Museum – Pilot Project**, Review of the National Center for Digitization, Vol. 23, pp. 57-66, 2013.
5. Matić Dragan, Kratica Jozef, **Filipović Vladimir** and Dugošija Đorđe, **Variable neighborhood search for Multiple Level Warehouse Layout Problem**, Electronic Notes in Discrete Mathematics, Vol. 39, pp. 161-168, 2012.
6. Matić Dragan, **Filipović Vladimir**, Savić Aleksandar and Stanimirović Zorica, **A Genetic Algorithm for Solving Multiple Warehouse Layout Problem**, Kragujevac Journal of Mathematics, Issue 35 Vol. 1, pp. 119-138, 2011.
7. Savić Aleksandar, Šukilović Tijana and **Filipović Vladimir**, **Solving the Two-Dimensional Packing Problem With m-M Calculus**, Yugoslav Journal of Operations Research – YUJOR, Vol. 21 No. 1, pp. 93-102, 2011.
8. Kratica Jozef, Tošić Dušan, **Filipović Vladimir** and Dugošija Đorđe, **A New Genetic Representation for Quadratic Assignment Problem**, Yugoslav Journal of Operations Research – YUJOR, Vol. 21 No. 2, pp. 225-238, 2011.
9. **Filipović Vladimir**, **An Electromagnetism Metaheuristic for the Uncapacitated Multiple Allocation Hub Location Problem**, Serdica Journal of Computing, Vol. 5 No. 3, pp. 261-272, 2011.
10. Kratica Jozef, Savić Aleksandar, **Filipović Vladimir** and Milanović Marija, **Solving the Task Assignment Problem with a Variable Neighborhood Search**, Serdica Journal of Computing, Vol. 4 No. 4, pp. 435-446, 2010.

11. Tošić Dušan, **Filipović Vladimir**, Tuba Milan and Kratica Jozef, **Potential Role of SMIL in Digitalization of National Heritage**, Review of the National Center for Digitization, Vol. 10, pp. 33-39, 2007.
12. Tošić Dušan, **Filipović Vladimir** and Kratica Jozef, **Using SVG–XML for representation of historical graphical data**, Review of the National Center for Digitization, Vol. 9, pp. 39-45, 2006.

From national conferences, published in proceedings (in Serbian)

1. Matić Dragan, Kratica Jozef and **Filipović Vladimir**, **Poboljšavanje nastavnog plana optimizovanjem broja pokrivenih tematskih oblasti po semestrima**, Treća matematička konferencija Republike Srpske - Zbornik radova, Tom 2, pp. 11-21, Trebinje, 2014.
2. Maksimović Darko, **Filipović Vladimir**, **Softver "Lenjir and šestar" and njegovo korišćenje u nastavi matematike**, Zbornik radova sa četvrtog simpozijuma "Matematika and primene", pp. 158-169, Beograd, 2013.
3. Kartelj Aleksandar, **Filipović Vladimir**, Milutinović Veljko, **Automatizovana klasifikacija ličnosti**, Zbornik radova sa simpozijuma **YU INFO 2012**, pp. 49, Kopaonik, 2012.
4. **Filipović Vladimir**, Zagračanić Mladen, Tošić Dušan and Stanišić Sanja, Digitalization in the Bar County Museum – Pilot Project, **The X National Conference New Technologies and Standards: Digitization of National Heritage 2011**. This paper is presented.
5. Tošić Dušan, **Filipović Vladimir**, Tuba Milan and Kratica Jozef Potential Role of SMIL in Digitalization of National Heritage, **Sixth National Conference New Technologies and Standards: Digitization of National Heritage 2007**. This paper is presented.
6. Tošić Dušan, **Filipović Vladimir** and Kratica Jozef, Using SVG–XML for representation of historical graphical data, **Fifth National Conference New Technologies and Standards: Digitization of National Heritage 2006**. This paper is presented.
7. Ljubić Ivana, Kratica Jozef and **Filipović Vladimir**, **Primena genetskih algoritama u nalaženju minimalnog Štajnerovog stabla**, Proceedings of the Second International Symposium of Industrial Engineering SIE '98, pp. 277-280, Belgrade, 1998.
8. Kratica Jozef, Ljubić Ivana, Šešum Vesna and **Filipović Vladimir**, **Neke metode za rešavanje problema trgovačkog putnika pomoću genetskog algoritma**, Proceedings of the Second International Symposium of Industrial Engineering SIE '98, pp. 281-284, Belgrade, 1998.
9. **Filipović Vladimir**, **Određivanje performansi genetskih algoritama u teoriji and praksi**, Prolećna škola o programskim jezicima - Tekstovi predavanja, pp. 131-141, Novi Sad, 1997.
10. **Filipović Vladimir**, Kratica Jozef, Radojević Slobodan and Vugdelija Milan, **Uticaj binarnog kodiranja na genetske algoritme za nalaženje ekstremnih vrednosti**, Zbornik radova sa X međunarodne konferencije o industrijskim sistemima, pp. 193-198, Novi Sad, 1996.
11. Vugdelija Milan, Kratica Jozef **Filipović Vladimir** and Radojević Slobodan, **Mogućnosti genetskih algoritama u mašinskom učenju**, Zbornik radova sa 22. JUPITER konferencije, pp. 4.55-4.59, Beograd, 1996.
12. Radojević Slobodan, Vugdelija Milan, Kratica Jozef and **Filipović Vladimir**, **Ograničavanje stvaranja aplikativnih objekata u proizvodnim informacionim sistemima**, Zbornik radova sa 22. JUPITER konferencije, pp. 4.13-4.16, Beograd, 1996.
13. Radojević Slobodan, Kratica Jozef, Vugdelija Milan and **Filipović Vladimir**, **Klasifikacija lambda-nula izraza relacijom denotacije**, Naučni simpozijum XXIII YU-SYM-OP-IS, pp. 292-295, Zlatibor, 1996.
14. Kratica Jozef, Radojević Slobodan, **Filipović Vladimir** and Šćepanović Ana, **Primena epsilon-transformacije u problemu pretrage drveta**, Međunarodni naučno-razvojni simpozijum: Stvaralaštvo kao uslov privrednog razvoja - Nove tehnologije and tehnike u službi čoveka, pp. 2.61-2.66, Beograd, 1996.

From international conferences, abstracts published

1. Grbić Milana, Kartelj Aleksandar, Matić Dragan and **Filipović Vladimir**, **A local search based heuristic for clustering large biological networks into highly connected components**, First Congress of Molecular Biologists of Serbia with international participation - 1st CoMBoS - Book of abstracts, pp. 126, Belgrade 2017. This **poster** is presented.

From national conferences, abstracts published (in Serbian)

1. **Filipović Vladimir**, Kartelj Aleksandar and Matić Dragan, **Primena keširanja u metaheuristici zasnovanoj na elektromagnetizmu**, Fifth Mathematical Conference of Republika Srpska - Book of Abstracts, pp. 42, Trebinje, 2015.
2. Matić Dragan, **Filipović Vladimir** and Kratica Jozef, **Pregled metoda za rješavanje problema maksimalno balansirane povezane particije u grafu**, Fourth Mathematical Conference of Republika Srpska - Book of Abstracts, pp. 73, Trebinje, 2014.
3. **Filipović Vladimir** and Tošić Dušan, **Comparasion of Selection Operators in Genetic Algorithms for the Function Optimization**, Abstracts of XI Conference on Applied Mathematics - PRIM '96, pp. 94, Budva, 1996.
4. **Filipović Vladimir**, **Realizacija genetskog algoritma**, Zbornik apstrakata sa simpozijuma SINFON '95, pp. 46, Zlatibor, 1995.
5. **Filipović Vladimir**, **Realizacija jednog iterativnog metoda na transpjuterskom sistemu**, Zbornik apstrakata sa simpozijuma SINFON '94, pp. 41, Zlatibor, 1994. This paper is awarded as the best paper in its section.

Activities in scientific community