Lista de lucrări în domeniul de ştiinţă definit de disciplinele din postul scos la concurs

NUMELE ŞI PRENUMELE: Pál László

I. LISTA PUBLICAŢIILOR RELEVANTE

1. **Pál, L.**, A genetic algorithm for the two-dimensional Single Large Object Placement Problem, *Proceedings of the 3rd Romanian-Hungarian Joint Symposium on Applied Computational Intelligence*, Timişoara, 2006, 253-260.

2. **Pál, L.**, Csendes, T., Improvements on the GLOBAL optimization algorithm with numerical tests, *Proceedings of the 7th international conference on applied informatics (ICAI 2007)*, B.V.B. Nyomda és Kiadó Kft., Eger, Hungary, 2007, 101-108.

3. Csendes, T., **Pál, L.**, Sendín, J.O.H., Banga, J.R., The GLOBAL Optimization Method Revisited, *Optimization Letters*, 2, 2008, 4, 445-454. (IF: 1.654)

4. **Pál, L.**, Csendes, T., INTLAB implementation of an interval global optimization algorithm, *Optimization Methods and Software,* 24, 2009, 4, 749-759. (IF: 0.651)

5. **Pál L.** és Csendes T., An interval based global optimization method and its application to sensor localization (Egy intervallum alapú globális optimalizálási módszer és alkalmazása szenzor lokalizálási feladatra – în limba maghiară). *Alkalmazott Matematikai Lapok*, 28, 2011, 17-39.

6. Pošík, P., Huyer, W., **Pál, L.**, A Comparison of Global Search Algorithms for Continuous Black-Box Optimization, *Evolutionary Computation*, 20, 2012, 4, 509–541. (IF: 2.109)

7. **Pál, L.**, Csendes, T., Markót, M.C., and Neumaier, A., Black-box optimization benchmarking of the GLOBAL method, *Evolutionary Computation,* 20, 2012, 4, 609–639. (IF: 2.109)

8. **Pál, L.,** Benchmarking a Hybrid Multi Level Single Linkage Algorithm on the BBOB Noiseless Testbed, *GECCO 2013: Genetic and Evolutionary Computation Conference Companion*, Black Box Optimization Benchmarking 2013 Workshop, ACM New York, 2013, 1145–1152.

9. **Pál, L.**, Comparison of Multistart Global Optimization Algorithms on the BBOB Noiseless Testbed, *GECCO 2013: Genetic and Evolutionary Computation Conference Companion*, Black Box Optimization Benchmarking 2013 Workshop, ACM New York, 2013, 1153–1160.

10. **Pál, L.**, Wireless sensor network localization using a multistage approach, *SACI 2014: Proceedings of the 9th IEEE International Symposium on Applied Computational Intelligence and Informatics*, Timişoara, 2014, 253-257.

II. LISTA COMPLETĂ DE PUBLICAȚII, CREAȚII, INVENȚII

A. Teza de doctorat.

Titlul: *Global optimization algorithms for bound constrained problems.*
Conducător ştiinţific: prof. univ. dr. Csendes Tibor, Universitatea din Szeged, Departamentul de Informatică
Anul susţinerii: 2011
Calificativ: Cum laude
Datele de identificare:
Pál L., *Global optimization algorithms for bound constrained problems*, Ed. Scientia, Cluj-Napoca, 2014, ISBN 978-973-1970-74-5.

B. Cărti publicate

B1. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate la edituri recunoscute în străinătate.

B2. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate în ţară, la edituri recunoscute CNCSIS.

1. **Pál L.**, Máté Sz., *Alkalmazásfejlesztés Delphiben (Dezvoltarea aplicaţiilor în Delphi)*, Ed. Scientia, Cluj-Napoca, 2009, ISBN 978-973-1970-16-5.

2. **Pál L.**, *Global optimization algorithms for bound constrained problems*, Ed. Scientia, Cluj-Napoca, 2014, ISBN 978-973-1970-74-5.

B3. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate la alte edituri sau pe plan local.

B4. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

B5. Capitole de cărţi publicate în străinătate

B6. Capitole de cărţi publicate în ţară

C. Lucrări ştiinţifice publicate

C1. Lucrări ştiinţifice publicate în reviste cotate ISI

1. Csendes, T., **Pál, L.**, Sendín, J.O.H., Banga, J.R., The GLOBAL Optimization Method Revisited, *Optimization Letters*, 2, 2008, 4, 445-454. (IF: 1.654)

2. **Pál, L.**, Csendes, T., INTLAB implementation of an interval global optimization algorithm, *Optimization Methods and Software,* 24, 2009, 4, 749-759. (IF: 0.651)

3. Pošík, P., Huyer, W., **Pál, L.**, A Comparison of Global Search Algorithms for Continuous Black-Box Optimization, *Evolutionary Computation*, 20, 2012, 4, 509–541. (IF: 2.109)

4. **Pál, L.**, Csendes, T., Markót, M.C., and Neumaier, A., Black-box optimization benchmarking of the GLOBAL method, *Evolutionary Computation,* 20, 2012, 4, 609–639. (IF: 2.109)

C2. Lucrări ştiinţifice publicate în reviste indexate în baze de date internaţionale (indicaţi şi baza de date).

Zbl=Zentralblatt, MR=MathSciNet

1. Illyés, L., **Pál, L.**, Generalized particular covering problem with genetic algorithms, *AMO–Advanced Modeling and Optimization*, 7, 2005, 1, 1-7. (MR2304343)

2. **Pál, L.**, Oláh-Gál, R., Makó, Z., Shepard interpolation with stationary points, *Acta Universitatis Sapientiae*, *Informatica*, 1, 2009, 1, 5-13. (Zbl pre05562320).

3. Oláh-Gál, R., **Pál, L.**, Some notes on drawing twofolds in 4-dimensional Euclidean space, *Acta Universitatis Sapientiae*, *Informatica*, 1, 2009, 2, 125-133. (Zbl. pre05605529).

4. **Pál L.** és Csendes T., An interval based global optimization method and its application to sensor localization (Egy intervallum alapú globális optimalizálási módszer és alkalmazása szenzor lokalizálási feladatra – în limba maghiară). *Alkalmazott Matematikai Lapok*, 28 2011, 17-39. (Zbl pre06223962)

C3. Lucrări ştiinţifice publicate în reviste din străinătate (altele decât cele menţionate anterior).

C4. Lucrări ştiinţifice publicate în reviste din ţară, recunoscute CNCSIS (altele decât cele din baze de date internaţionale).

C5. Lucrări ştiinţifice publicate în reviste, altele decât cele menţionate anterior

Pál L., Peer-to-Peer hálózatok: múlt, jelen, jövő, Krónika, X. Évfolyam, 65 szám, 16. oldal, 2008.

C6. Lucrări ştiinţifice publicate în volumele manifestărilor ştiinţifice

Zbl=Zentralblatt, ACM=Association for Computing Machinary, IEEE

1. Oláh-Gál, R., **Pál, L.**, Discrete approximation, *Proceedings of the 6th International Conference on Applied Informatics (ICAI 2007)*, B.V.B. Nyomda és Kiadó Kft., Eger, Hungary, 2004, 409-415. (Zbl 1074.68507)

2. **Pál, L.**, Presentation of the Sapi-Cut program package, *Proceedings of Workshop on Cutting Stock Problems 2005*, Miercurea-Ciuc, 2005, 65-73.

3. **Pál, L.**, A genetic algorithm for the two-dimensional Single Large Object Placement Problem, *Proceedings of the 3rd Romanian-Hungarian Joint Symposium on Applied Computational Intelligence*, Timişoara, 2006, 253-260.

4. **Pál, L.**, Csendes, T., Improvements on the GLOBAL optimization algorithm with numerical tests, *Proceedings of the 7th international conference on applied informatics (ICAI 2007)*, B.V.B. Nyomda és Kiadó Kft., Eger, Hungary, 2007, 101-108. (Zbl pre05662513)

5. Csendes, T., **Pál, L.**, A basic interval global optimization procedure for Matlab/INTLAB, *Proceedings of International Symposium on Nonlinear Theory and its Applications (NOLTA2008)*, Budapest, 2008, 592-595.

6. **Pál L.**, Globális optimalizálási algoritmusok korlátos feladatokra, Doktorandus fórum, Csíkszereda, 2010, 120-127.

7. **Pál, L.**, Csendes, T., Efficient estimation of loads in service networks, *Proceedings of the 10th International Conference on Applied Informatics (ICAI2010)*, B.V.B. Nyomda és Kiadó Kft., Eger, Hungary, 2011, 621–629.

8. **Pál, L.**, Benchmarking a Hybrid Multi Level Single Linkage Algorithm on the BBOB Noiseless Testbed, *GECCO 2013: Genetic and Evolutionary Computation Conference Companion*, ACM New York, 2013, 1145–1152. (doi: 10.1145/2464576.2482692)

9. **Pál, L.**, Comparison of Multistart Global Optimization Algorithms on the BBOB Noiseless Testbed, *GECCO 2013: Genetic and Evolutionary Computation Conference Companion*, ACM New York, 2013, 1153–1160. (doi: 10.1145/2464576.2482693)

10. **Pál, L.**, Wireless sensor network localization using a multistage approach, *SACI 2014: Proceedings of the 9th IEEE International Symposium on Applied Computational Intelligence and Informatics*, Timişoara, 2014, 253-257 (DOI: 10.1109/SACI.2014.6840071).

D. Traduceri de cărţi, capitole de cărţi, alte lucrări ştiinţifice

E. Editare, coordonare de volume

Pál, L. (editor), *Proceedings of Workshop on Cutting Stock Problems 2005*, Editura Alutus, Miercurea-Ciuc, 2005, 100 pag. ISBN (13) 978-973-7875-28-0

F. Brevete de invenţii şi alte titluri de proprietate

G. Contracte de cercetare (menţionaţi calitatea de director sau membru)

1. „*Cercetări de geometrie diferenţială asistată de calculator*", Grant IPC Sapientia, 2002-2004, membru.

2. „*Two dimensional cutting stock problems with genetic algorithms*", Grant IPC Sapientia, 2004-2006, membru.

3. „*Development of Global Optimization Methods and Their Application for Specific Hard Problems*", Grant bilateral (Austria-Ungaria), 2008-2009, membru

4. „*Dezvoltarea şi testarea programei de optimizare GLOBAL*", Grant suportat de Academia Ştiinţifică Maghiară, 2008 (august-septembrie), director

5. „*Testarea şi compararea unei metode de optimizare globală*", Grant suportat de Fundaţia Eurotrans, 2008 (noiembrie), director

6. „*Dezvoltarea unei metode de optimizare globală folosind aritmetica intervalelor*", Grant suportat de Academia Ştiinţifică Maghiară, 2009 (iulie), director.

7. „*Aplicarea unei noi metode Newton în optimizare globală cu intervale*", Grant suportat de Fundaţia Eurotrans, 2009 (3 luni), director.

8. „*Aplicarea şi testarea unei noi metode Newton în optimizare globală cu intervale*", Grant suportat de Academia Ştiinţifică Maghiară, 2009 (3 luni), director.

9. „*Colectarea şi prelucrarea datelor bazată pe reţele senzoriale*", Grant suportat de Guvernul Ungariei şi Uniunea Europeană (TÁMOP 4.2.2-8/1/2008-0008), 2009-2011, membru.

10. „*Reliable computational techniques for dynamical systems and their application for open theoretical problems*", Grant bilateral (Ungaria-Japonia), 2010-2012, membru.

11. „*Elaborarea şi testarea unei metode de optimizare globală de tip multistart*", Grant IPC Sapientia, 2012-2013, director.

12. „*Optimizarea reţelelor senzoriale*", Grant suportat de Academia Ştiinţifică Maghiară, 2013 (1 lună), director.

H. Creaţia artistică

H1 Participări la manifestaţii artistice internaţionale

H2. Participări la manifestaţii artistice naţionale

H3. Expoziţii, filme, spectacole, concerte, discuri de autor, opere internaţionale

H4. Expoziţii, filme, spectacole, concerte, discuri de autor, opere naţionale

H5. Produse cu drept de proprietate intelectuală în domeniul artistic

III. RECUNOAŞTEREA

I. Premii, distincţii.

J. Citări

1. **Pál, L.**, A genetic algorithm for the two-dimensional Single Large Object Placement Problem, *Proceedings of the 3rd Romanian-Hungarian Joint Symposium on Applied Computational Intelligence*, Timişoara, 2006, 253-260.
    i. Zhu, J., Zhang, W., Pierre Beckers, Integrated layout design of multi-component system, International, *Journal for Numerical Methods in Engineering*, 78, 2009, 6, 631 – 651.
    ii. Zhang, W., Xia, L., Zhu, J., and Zhang, Q., Some Recent Advances in the Integrated Layout Design of Multicomponent Systems, *Journal of Mechanical Design*, 133, 2011, 10, 15 pages.
    iii. Zhu, J., Zhang, W., Xia, L., Zhang, Q. and Bassir, D., Optimal Packing Configuration Design with Finite-Circle Method, *Journal of Intelligent & Robotic Systems*, 67, 2012, 3-4, 185-199.

2. **Pál, L.**, Csendes, T., Improvements on the GLOBAL optimization algorithm with numerical tests, *Proceedings of the 7th international conference on applied informatics (ICAI 2007)*, B.V.B. Nyomda és Kiadó Kft., Eger, Hungary, 2007, 101-108.
    i. Eső, P., Simonovits, A., and Tóth, J., Designing benefit rules for flexible retirement: Welfare vs. redistribution, *Acta Oeconomica*, 61, 2011, 1, 3-32.
    ii. Adewumi, J., Ilemobade, A., and van Zyl, J., Planning Model for Wastewater Reuse System in South Africa, *In Proceedings of Water Distribution Systems Analysis 2008 Conference*, 2009, 1-13, doi: 10.1061/41024(340)10. (ASCE – American Society of Civil Engineers Library)

3. Csendes, T., **Pál, L.**, Sendín, J.O.H., Banga, J.R., The GLOBAL Optimization Method Revisited, *Optimization Letters*, 2, 2008, 4, 445-454.
    i. Fuchs, M., *Uncertainty modeling in higher dimensions: Towards robust design optimization*, PhD dissertation, University of Vienna, 2008.
    ii. Vikal, R. and Goyal, G., TCSC Controller Design Using Global Optimization for Stability Analysis of Single Machine Infinite-Bus Power System, *Proceedings of the 15th International Conference on Intelligent System Applications to Power Systems*, Curitiba, 2009. 1-7. (IEEE)
    iii. Steenackers, G., Presezniak, F., and Guillaume, P., Development of an adaptive response surface method for optimization of computation-intensive models, *Computers & Industrial Engineering*, 57, 2009, 3, 847-855.
    iv. Ochoa, S., Repke, J.U., and Woznya, G., A New Algorithm for Global Optimization: Molecular-Inspired Parallel Tempering, *Computer Aided Chemical Engineering*, Springer Book Series, 27, 2009, 279-284.
    v. Lei, Y. and Chen, S., A Reliable Parallel Interval Global Optimization Algorithm Based on Mind Evolutionary Computation, *Fourth ChinaGrid Annual Conference*, Yantai, Shandong, 2009, 205-209.
    vi. Ochoa, S., Wozny, G., and Repke, J.U., A New Algorithm for Global Optimization: Molecular-Inspired Parallel Tempering, *Computers and Chemical Engineering*, 34, 2010, 12, 2072–2084.
    vii. Lei, Y., Chen, S., and Yan, Y., A Novel Parallel Interval Exclusion Algorithm, *High Performance Computing and Applications, Lecture Notes in Computer Science*, 5938, 2010, 218-223.
    viii. Ahrari, A. and Ahrari, R., On the utility of randomly generated functions for performance evaluation of evolutionary algorithms, *Optimization Letters*, 4, 2010, 4, 531-541.
    ix. Ochoa, S., *Plantwide Optimizing Control for the Continuous Bio-Ethanol Production Process*, PhD Dissertation, 2010.
    x. Rios-Coelho, A.C, Sacco, W.F., Henderson, N., A Metropolis algorithm combined with Hooke-Jeeves local search method applied to global optimization, *Applied Mathematics and Computation*, 217, 2010, 2, 843-853.
    xi. Neumaier, A., Fendl, H., Schilly, H., and Leitner, T., Derivative-free unconstrained optimization based on QR factorizations, *Soft Computing*, 15, 2011, 11, 2287-2298.
    xii. Srikanthakumar, S. and Chen, W.H., Optimisation-based Verification Process of Obstacle Avoidance Systems for Unicycle-like Mobile Robots, *International Journal of Automation and Computing*, 8, 2011, 3, 340-347.
    xiii. Cheng, M.Y., Huang, K.Y., and Chen, H.M., Dynamic guiding particle swarm optimization with embedded chaotic search for solving multidimensional problems, *Optimization Letters*, 6, 2012, 4, 719-729.

xiv. Pintér, J.D. and Kampas, F.J., Benchmarking nonlinear optimization software in technical computing environments, *TOP (Journal of the Spanish Society of Statistics and Operations Research)*, 21, 2013, 1, 133-162.

xv. Pereira, A.I., Ferreira, O., Pinho, S. P., and Fernandes, M.G.P. Edite, Multilocal Programming and Applications, *Intelligent Systems Reference Library (Springer Book Series), Springer-Verlag Berlin Heidelberg*, 38, 2013, 157-186.

xvi. Rios, L.M. and Sahinidis, N.V., Derivative-free optimization: A review of algorithms and comparison of software implementations, *Journal of Global Optimization*, 56, 2013, 3, 1247-1293.

xvii. Price, C. J., Reale, M., and Robertson, B.L., One side cut accelerated random search, *Optimization Letters*, 2013.

xviii. Abaffy, J. and Galántai, A., An always convergent algorithm for global minimization of univariate Lipschitz functions, *Acta Polytechnica*, 10, 2013, 7, 21-39.

xix. Abaffy, J. and Galántai, A., A new method for minimization of real Lipschitz functions, *IEEE 8th International Symposium on Applied Computational Intelligence and Informatics (SACI)*, 2013, 95 – 98.

xx. Lemarchand, F., Application of clustering global optimization to thin film design problems, *Optics Express*, 22, 2014, 5, 5166-5176.

4. **Pál, L.**, Csendes, T., INTLAB implementation of an interval global optimization algorithm, *Optimization Methods and Software,* 24, 2009, 4, 749-759.
   i. Sahinidis, N.V., Global optimization, *Optimization Methods and Software,* 24, 2009, 4-5, 479-482.
   ii. Rufo, M.J., Martín, J., and Pérez, C.J., A note on the prior parameter choice in finite mixture models of distributions from exponential families, *Computational Statistics*, 25, 2010, 3, 537-550.
   iii. Otero-Muras, I., Banga, J.R., and Alonso A.A.: Characterizing Multistationarity Regimes in Biochemical Reaction Networks. *PLoS ONE*, 7, 2012, 7, e39194.
   iv. Wang, K., Chai, Y., Yao, Y., and Li, P., Nonlinear independent component analysis based on interval optimization, *32nd Chinese Control Conference (CCC), China* , 2013, 4602 - 4606. (IEEE)
   v. Pintér, J.D. and Kampas, F.J., Benchmarking nonlinear optimization software in technical computing environments, *TOP (Journal of the Spanish Society of Statistics and Operations Research)*, 21, 2013, 1, 133-162.

K. Alte realizări semnificative.

1. Coautor software de optimizare globală (GLOBAL). Se poate descărca şi folosi în scopuri necomerciale de la www.inf.u-szeged.hu/~csendes/Reg/regform.php

2. Coautor software de optimizare globală bazată pe aritmetica intervalelor (MATLAB/INTLAB). Se poate descărca şi folosi în scopuri necomerciale de la http://www.inf.u-szeged.hu/~csendes/Reg/regform.php

3. Recenzii în reviste: *Annals of Operations Research (ANOR), Journal of Engineering and Computer Innovations (JECI), Applied Mathematics and Computation (AMC), Optimization Letters (OPTL), Computers and Operational Research (COR), Acta Technica Jaurinensis (ATJ), Industrial & Engineering Chemistry Research (IECR).*

4. Organizare evenimente ştiinţifice:

   a. Membru în comitetul de organizare al conferinţei "EME 150 éves", Miercurea-Ciuc, 6-7 noiembrie 2009.
   b. Membru în comitetul de organizare al conferinţei omagiale "Bolyai Farkas", Miercurea-Ciuc, 25-26 noiembrie 2006.

c. Membru în comitetul de organizare al conferinței "Workshop on Cutting Stock Problems", Miercurea-Ciuc, 3-5 iunie 2005.
d. Membru în comitetul de organizare al conferinței „Haos în sisteme dinamice", Miercurea-Ciuc, 3-5 martie 2005.

Data, 14.07.2014

Semnătura,