CURRICULUM VITAE

Keyvan Amini   **کیوان امینی**
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Personal Data: .

• **Date of birth:** August 24, 1974 in Kermanshah, Iran
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Education: .

•**Ph.D.** in Applied Mathematics, **2004,**
    Sharif University of Technology, Tehran, Iran
    Advisor: Professor NezamMahdavi-Amiri

•**M.Sc.** in Optimization**, 1998**
    Sharif University of Technology, Tehran, Iran
    Advisor: Professor NezamMahdavi-Amiri

•**B.Sc.** in Pure Mathematics**, 1996**
    Razi University, Kermanshah, Iran

Honors   .

• Awarded as the top student of the Department of Mathematics, Sharif University
of Technology, 1998.

• Ranked Number one among all students MS (Pure and Applied), Department of
Mathematics, Sharif University of Technology, 1998.

• Ranked number one in entrance examinations among more than 10000 applicants seeking admission to graduate studies in Applied Mathematics in Iran, 1996.

• Ranked Number one among all students BS, Department of Mathematics, Razi University, 1996.

Professional Experience .

Dean of the Faculty of Science: Razi University, Kermanshah, Iran 2016-2021

Head of the Mathematics Department: 2009-2011.
Razi University, Kermanshah, Iran

Professor: 2016 – Present
Department of Mathematics, Razi University, Kermanshah, Iran

Associate Professor: 2010 – 2016
Department of Mathematics, Razi University, Kermanshah, Iran

Assistant Professor: 2004 – 2010.
Department of Mathematics, Razi University, Kermanshah, Iran

- ریاست دانشکده علوم دانشگاه رازی از شهریور ۱۳۹۵ تا دی ماه ۱۴۰۰
- عضویت در هیات ممیزه دوره هفتم دانشگاه رازی کرمانشاه ۱۴۰۱-
- عضویت در هیات ممیزه دوره ششم دانشگاه رازی کرمانشاه ۱۴۰۱-۱۳۹۹
- عضویت در هیات ممیزه دوره پنجم دانشگاه رازی کرمانشاه ۱۳۹۹-۱۳۹۷
- عضویت در هیات ممیزه دانشگاه ایلام ۱۳۹۹-۱۳۹۷
- ریاست کمیسیون تخصصی علوم پایه دانشگاه رازی ۱۴۰۱-۱۳۹۹
- ریاست کمیته منتخب دانشکده علوم دانشگاه رازی کرمانشاه ۱۴۰۰-۱۳۹۵
- ریاست کارگروه جذب هیات علمی دانشگاه رازی ۱۳۹۵- ۱۴۰۰

Published Papers .

[1] *K. Amini, "Solving Rank One Revised Linear Systems by the Scaled ABS Method", ANZIAM JOURNAL 46(2)* (2004), 225-236.

[2] *K. Amini, N. Mahdavi-Amiri and M. R. Peyghami, "ABS-type methods for solving full row rank linear systems using a new rank two update", Bulletin of the Australian Mathematical Society 70* (2004) , 17-34.

[3] *K. Amini, M. R. Peyghami, "An Interior-Point Method for Linear Programming Based on a Class of Kernel Functions", Bulletin of the Australian Mathematical Society 71* (2005), 139-153.

[4] *K. Amini, M. R. Peyghami, "An Interior-Point Algorithm for Linear Optimization Based on a New Kernel Function", SEAMS (Southeast Asian Bulletin of Mathematics) 32* (2005), 1-18.

[5] K. Amini, M. R. Peyghami, "Complexity analysis of interior-point methods for linear optimization based on some conditions on kernel function", *Applied Mathematics and Computation* 176 (2006), 194-207.

[6] K. Amini and N. Mahdavi-Amiri, "Solving rank one perturbed linear Diophantine systems by the ABS methods", *Optimization Methods and Software 21*, (2006), 819-831.

[7] K. Amini, A New Variant of Newton's Methods with Fourth order Convergence, *International Journal of Computational and Applied Mathematics 2(2)*, (2007),173-179.

[8] K. Amini, N. Mahdavi-Amiri and M. R. Peyghami, "Extended reduced rank two Abaffian update schemes in the ABS-type methods", *Applied Mathematics and Computation 185(1)*, (2007),255-265.

[9] K. Amini and A.Haseli, "A new proximity function generating the best known iteration bounds for both large-update and small update interior point methods" , *ANZIAM JOURNAL 49*,1-12 (2007).

[10] K. Amini and M. R. Peyghami, "Exploring Complexity of Large Update Interior-Point Methods for $P_*(k)$ Linear Complementarity Problems Based on Kernel Function", *Applied Mathematics and Computation 207*, (2009), 501–513.

[11] M. R. Peyghami and K. Amini ,A kernel function based interior-point methods to solve $P_*(k)$-linear complementary problem, *Acta Mathematica Sinica 26(9) ,(2010)*, 1761-1778.

[12] K. Amini and A. Ghorbani Rizi, A new Structured Quasi-Newton Algorithm using Partial Information on Hessian, *Journal of Computational and Applied Mathematics 234(3)*, (2010),805-811.

[13] K. Amini and M. Ahookhosh, A Nonmonotone Trust Region Method with Adaptive Radius,*Computers and Mathematics with Applications60(3)*(2010), 411-422.

[14] K. Amini and M. Ahookhosh, Combination adaptive trust region method by nonmonotone strategy for unconstrained nonlinear programming, Asia-Pacific Journal of Operational Research 28(5) (2011), **585-600**.

[15] M. Ahookhosh, K. Amini andM. R. Peyghami, A nonmonotone trust-region line search method for large-scale unconstrained optimization, *Applied Mathematical Modelling 36(1)*, (2012), 478-487.

[16] M. Ahookhosh and K. Amini, An efficient nonmonotone trust-region method for unconstrained optimization, *Numerical Algorithms 59* (2012), 523-540.

[17] Masoud Ahookhosh, Keyvan Amini and Somayeh Bahrami, A class of nonmonotone Armijo-type line search method for unconstrained optimization, *Optimization 61(4)* (2012), 387-404.

[18] Masoud Ahookhosh, Keyvan Amini and Somayeh Bahrami, Two derivative-free projection approaches for systems of large-scale nonlinear monotone equations, *Numerical Algorithms* 64 (2013), 21–42.

[19] Keyvan Amini, Masoud Ahookhosh, and Hadi Nosratipour, An inexact line search approach using modified nonmonotone strategy for unconstrained optimization, *Numerical Algorithms 66(1)* (2014), 49-78.

[20] Keyvan Amini, Masoud Ahookhosh, A hybrid of adjustable trust-region and nonmonotone algorithms for unconstrained optimization, **Applied Mathematical Modelling** 38(9) (2014), 2601-2612.

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[22] Keyvan Amini, Ahmad Kamandi, A new line search strategy for finding separating hyperplane in projection-based methods**, *Numerical Algorithms 70(3)* (2015), 559-570.

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[27] Keyvan Amini, MAK Shiker, Morteza Kimiaei, A line search trust-region algorithm with nonmonotone adaptive radius for a system of nonlinear equations, 4OR (2016), 1-20.

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[34] Mushtak AK Shiker, Keyvan Amini, A new projection-based algorithm for solving a large-scale nonlinear system of monotone equations, Croatian Operational Research Review 9(1) (2018), 63-73.

[35] Farzad Rahpeymaii, Keyvan Amini, T. Allahviranloo, M. Rostamy Malkhalifeh , A new class of conjugate gradient method for unconstrained optimization problems with an application to solve absolute value equations, CALCOLO 56(1) (2019).

[36] Hadi Nosratipour, Keyvan Amini, A Descent PRP Conjugate Gradient Method for unconstrained optimization, TWMS Journal of Applied and Engineering Mathematics 9 (3) (2019), 535

[37] Ahmad Kamandi, Keyvan Amini, A New Strategy for Choosing the Radius Adjusting Parameters in Trust Region Methods, Journal of Operational Research and Its Applications 16(2), (2019) 89-95.

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[47] کیوان امینی ، فرامرز رستمی، یک روش لونبرگ-مارکوارت اصلاح شده با یک جستجوی خطی جدید غیریکنوا برای حل دستگاه معادلات غیرخطی، **مجله تحقیق در عملیات در کاربردهای آن**

Papers in Conferences:

۱۹. یک روش شبه نیوتن خودمقیاس اصلاح یافته جدید برای حل مساله بهینه سازی نامقید، یازدهمین کنفرانس بین المللی انجمن ایرانی تحقیق در عملیات ۱۳۹۷ (کیوان امینی، سوما براری)

۱۸. روش شبه BB برای محاسبه بزرگترین مقدار ویژه ، یازدهمین کنفرانس بین المللی انجمن ایرانی تحقیق در عملیات ۱۳۹۷ (کیوان امینی، پروانه فرامرزی)

۱۷. یک الگوریتم ناحیه اطمینان دوگامی برای حل دستگاه های معادلات غیرخطی، یازدهمین کنفرانس بین المللی انجمن ایرانی تحقیق در عملیات ۱۳۹۷ (کیوان امینی، سمیه بهرامی)

۱۶. یک الگوریتم غیریکنوا اصلاح شده برای بهینه سازی غیرخطی نامقید، هشتمین کنفرانس بین المللی انجمن ایرانی تحقیق در عملیات، دانشگاه فردوسی مشهد، مشهد، ایران، ۳۱ اردیبهشت-۱ خرداد ۹۴. (زهره کاکایی، کیوان امینی).

۱۵. تحلیل و تشخیص تغییرات تصاویر ماهواره ای بر اساس طبقه بندی فازی و زیر تقریب ماتریس تنک. دومین کنفرانس بین المللی بازشناسی الگو و تحلیل تصویر (محمد صیاد گلیان، کیوان امینی، عبداله چاله چاله)

14. A new adaptive trust region algorithm for large-scale unconstrained optimization, 5th Iranian Conference on Applied Mathematics, Bu-Ali Sina University, September 2013, (Joint work with A. Kamandi and M. Ahookhosh).

13. Derivative-free projection methods for nonlinear monotone systems, 5th Iranian Conference on Applied Mathematics, Bu-Ali Sina University, September 2013.

12. A new approach for determining radius in nonmonotone trust-region algorithms, 5th Iranian Conference on Applied Mathematics, Bu-Ali Sina University, September 2013, (Joint work with M.Rashidi and M. Ahookhosh).

11. Improving nonmonotone trust-region methods, *4rd International Conference of Iranian Operations Research Society, Guilan University*, May 2011(Joint work with M. Ahookhosh)

10. A modified class of conjugate gradient methods with a new nonmonotone Armijo-type line search, *4rd International Conference of Iranian Operations Research Society, Guilan University*, May 2011 (Joint work with H. Nosratipour)

9. A nonmonotone trust region method with adaptive radius for unconstrained optimization, MEC-EUROPT 2010 *24th Mini EURO Conference,* June 23-26, *2010, Izmir*, Turkey

8. A nonmonotone trust region method with adaptive radius for unconstrained optimization, *3rd International Conference of Iranian Operations Research Society, Amirkabir University of Technology* , May 2010 (Joint work withM. Ahookhosh)

7. A modified class of nonmonotone Armijo-type line search method for unconstrained optimization ,*3rd International Conference of Iranian Operations Research Society*, Amirkabir University of Technology ,May 2010 (Joint work with M. Ahookhosh and S. Bahrami)

6. A structured quasi-Newton algorithm for unconstrained optimization , *1- th Annual Iranian Operation Research Conference*, Kish University, Kish, Iran, 2010.

5. A new trust region algorithm for unconstrained optimization,*39- Annual Iranian Mathematics Conference*, shahid Bahonar University, Kerman, Iran, 2008. (Joint work withM. Ahookhosh)(IN Persian)

4. A Scale BFGS gradient algorithm for unconstrained optimization,*39- Annual Iranian Mathematics Conference*, shahid Bahonar University, Kerman, Iran, 2008. (Joint work withM. Ahookhosh)(IN Persian)

3. Solving rank one revised linear systems by the Scaled ABS methods , *34- th Annual Iranian Mathematics Conference*, Shahrood University, Shahrood, Iran, August 2003. (Joint work with N. Mahdavi-Amiri)

2. ABS-type Methods for Solving Full Row Rank Linear Systems Using a New Rank Two Update, *34- Annual Iranian Mathematics Conference*, shahrood University, Shahrood, Iran, August 2003. (Joint work with M.R.Peyghami and N. Mahdavi-Amiri)

1. Extended Reduced Abaffian Rank Two Update Schemes in the ABS Methods, The Mathematics of Information Technology and Complex Systems *(MITACS)*, Halifax, Nova Scotia, Canada, June 2004. (Joint work with M.R.Peyghami and N. Mahdavi-Amiri)

- **دانشجویان دکتری فارغ التحصیل**
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