

Mahsa Paykanian

Curriculum Vitae

Personal Profile

Name Mahsa Paykanian.

Date of Birth May 14, 1985.

Place of **Isfahan**.

Birth

Gender Female.

Nationality Iranian.

Marital Single.

Status

Education

2024-2025 **Postdoctoral researcher**, Shahrood University of Technology.

2022-2023 Research Visitor, Universitat Autònoma de Barcelona.

2018–2024 **PhD of Mathematics**, Shahrood University of Technology.

2013–2015 Master of Mathematics, Isfahan University of Technology.

2004–2008 Bachelor of Mathematics, Payame Noor University.

2000-2004 High School of Mathematics-Physic, Isfahan, Tarbiat High School.

PhD Thesis

Title On Ore Extension Of Ikeda-Nakayama Rings

Supervisors Professor Ebrahim Hashemi

Description In this thesis we study some extensions of Ikeda-Nakayama rings. For example

we investigate Ore extensions, skew power series and monoid rings over an Ikeda-

Nakayama ring.

Mark 20 of 20.00

Masters Thesis

Title A Generalization of Complete Reducibility

Department of Mathematics – Shahrood University of Technology (+98) 9132708918 • \bowtie mahsapeikanian@gmail.com

Supervisor Associated Professor Atefeh Ghorbani

Description The thesis is based on the article entitled "A Generalization of Complete Reducibility" by Y. Hirano and coauthors. We studied a ring whose left modules of finite length are semisimple. In this thesis we state some results on such a ring and we also consider when such a ring is a left V-ring. We extracte all their results with more explain and information.

Grade 19.37 of 20.00

Papers

Pubished

- 1 Naseripour, N., Hashemi, E., & Paykanian, M., **On the sum of annihilators in nearrings**, *Quaestiones Mathematicae*, 1-16, (2025). DOI: 10.2989/16073606.2025.2511098
- 2 E. Hashemi and M.Paykanian., **On the sum of annihilators of monoid rings**, Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas., 118(4): 155, (2024). DOI: 10.1007/s13398-024-01657-1
- 3 H. Aqania, E. Hashemi and M. Paykanian., **On left annihilating content polynomials and power series**, *Communications in Algebra.*, 1-12, (2024), DOI: 10.1080/00927872.2024.2332936
- 4 M. Paykanian, E. Hashemi, and A. Alhevaz., **On sum annihilator ideals in Ore exrensions**, *Hacettepe Journal of Mathematics and Statistics.*, 1-10, (2023), DOI: 10.15672/hujms.1037521
- 5 E. Hashemi and M. Paykanian., **On annihilator ideals in skew power series rings**, *Communication in Algebra.*, 11-12, (2022), DOI: 10.1080/00927872.2022.2099552
- 6 M. Paykanian, E. Hashemi, and A. Alhevaz., On skew polynomials over Ikeda-Nakayama rings, Communication in Algebra., 49(9): 4038-4049, (2021), DOI: 10.1080/00927872.2021.1912064

In Progress

- 7 A project on Generalized powerseries rings with Ebrahim Hashemi and Christian Lomp
- 8 A project on rank functions with Dolors Herbera and Simone Virili
- 9 A project on left annihilating content in monoid rings with Ebrahim Hashemi

Workshop

1 ACLiC Workshop Algebra, Categories and Logic in Computing(a Farsi-English workshop) 20-21 June 2023, St Erme, France

Grade Point Average

Bachelor GPA in Bachelor: 15.17 of 20.00 Master GPA in Master: 18.13 of 20.00 PhD GPA in PhD: 18.33 of 20.00

Informatics Knowledge

Advanced LATEX, Microsoft Windows, Micosoff Office and programming languages such as Pascal and C

Awards and Academic Honors

1 I achived the first place between the M.Sc. graduated students in 2015

Teaching

Mathematics High schools and secondary schools

Preliminary High schools

statistics

Calculus 1 Department of Mathematics, Shahrood University of Technology, 2024-2025.

Working Experience

High School I was a high school teacher between 2008 and 2013. I taught preliminary statistics Teaching and high school calculus.

Experience

Undergraduate Calculus 1, Department of Mathematics, Shahrood University of Technology, 2024– Teaching 2025

Doctoral PhD Thesis Advising on "Nearrings Having SA and IN Properties" Advising

Research Interests

My current research interests are Ring and Module Theory, Near-ring Theory, Radical Theory as well as Category Theory. My education is focused on ring and module theory. Between 2022 to 2023, during my research opportunity, under the supervision of Professor Dolors Herbera and Simone Virili, I have endeavored to learn more about category theory and conducted research on rank functions. I am eager to enhance my practical understanding of algebra and explore further applications of this beautiful and captivating branch of mathematics.

Languages

Persian **Mothertongue**English **Intermediate**