

Mahdi Salehzadeh

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Highlights

Familiar with Mathematical Softwares
Familiar with Optimization Methods
Proven Track Record of Teamwork Experiences

Expert in Problem Modeling
Strong Time Management Skills
Expert in Computation Subjects

Education

Ph.D. Applied Mathematics , Simon Fraser University, BC, Canada Infectious Disease Modelling and Estimation Advisor: Ailene MacPherson, John M. Stockie	2023 – current
MSc. Applied Mathematics , Simon Fraser University, BC, Canada Thesis: Computational Study of 2D Jellyfish with the Immersed Boundary Method Advisor: John M. Stockie	2021 – 2022
BSc. Computer Science , Amirkabir University of Technology, Tehran, Iran Project: Cardinality Optimization (Cardinality Constrained Problems) Advisor: S. A. Mirhassani	2015 – 2019

Teaching

Numerical Analysis MACM 316, SFU, Teaching Assistant
2024, 2023, 2021

Introduction to Biomathematics MATH 360, SFU, Teaching Assistant
2023

Mathematics in Sports MAT 303, SFU, Teaching Assistant
2022

Applied Calculus Workshop ACW, SFU, Teaching Assistant
2023, 2022, 2021

Linear Algebra MATH 232, SFU, Teaching Assistant
2021

Talks & Posters

Talks Evolution of Seed Masting (Or Not?), CAIMS (2024)
Evolution of Seed Masting (Or Not?), CSEE, (2024)
Computational Study of 2D Jellyfish with the IBM, CAIMS, (2023)

PosterA Sequential Approach to Bark Beetle Outbreaks, Eco-Evo, (2023)
A Sequential Approach to Bark Beetle Outbreaks, SIAM PNW, (2023)

Honors & Ranking

1st poster presentation award, SIAM PNW	2023
Top 5 percent rank, Iranian National Universities Entrance Exam (Mathematics and Physics branch)	2014
Top 5 percent rank, Iranian National Universities Entrance Exam (Foreign Languages)	2014
Top 5 percent rank in GPA in BSc., Among co-entry students, AmirKabir University of Technology	2019

Funding & Awards

Travel & Minor Research Award, SFU, Summer 2024	1,200 CAD
Graduate Fellowship, SFU, Summer 2024	7,000 CAD
Travel & Minor Research Award, SFU, Fall 2023	900 CAD
First Place Poster Award, SIAM PNW, Fall 2023	100 USD
Travel & Minor Research Award, SFU, Spring 2023	900 CAD
Travel Fund, CAIMS, Spring 2023	1,200 CAD
Graduate Fellowship, SFU, Summer 2022	7,000 CAD
Travel & Minor Research Award, SFU, Spring 2022	800 CAD
Travel & Minor Research Award, SFU, Summer 2021	800 CAD

Research Interests

Epidemiological Disease Modelling, Computational Fluid Dynamics, Numerical Analysis, Optimization

Technical Strengths

Programing Languages C, Java, Python, MATLAB, Mathematica

Software & Tools \LaTeX , Word, Excel, Powerpoint

Languages

Persian, English, Turkish, Azeri

Professional Activities

University Services President, Mathematics Graduate Caucus, SFU, Summer 2024

Vice-President, Mathematics Graduate Caucus, SFU, Spring 2024

Member of the Central Council, Student Cultural Association, AUT, 2017

Member of the Central Council, Student Environmental Association, AUT, 2017

Social Services First Aid Volunteer, Iranian Red Crescent Society, 2017

Publications

Mahdi Salehzadeh, John M. Stockie, and Ailene MacPherson. Aggregation unveiled: A sequential modelling approach to bark beetle outbreaks. *Theoretical Population Biology*, 160:62–69, 2024. ISSN 0040-5809. doi: <https://doi.org/10.1016/j.tpb.2024.10.002>. URL <https://www.sciencedirect.com/science/article/pii/S0040580924000947>.