



Sukrit Mittal, Ph.D.

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I am the Director of AI & Optimization Research at Franklin Templeton, leading a team of data scientists and developers. My work focuses on leveraging advanced AI, including Generative AI and Reinforcement Learning, and optimization techniques to conceptualize and develop innovative financial products. I have close to seven years of research experience in optimization and machine learning, actively collaborating with renowned researchers. Currently, I am applying reinforcement learning methods for solving the goals-based wealth management problem and exploring Generative AI for creating digital twins in financial processes.

EDUCATION

Data Science for Investment Professionals Certificate
CFA Institute, USA ([Credential](#))

Jun. 2023 - Jun. 2024

Ph.D. in ML-assisted Optimization

Indian Institute of Technology Roorkee, India CGPA : 9.47/10

Jul. 2018 - Aug. 2022

Thesis: Machine Learning based Enhancements in Evolutionary Multi-objective Optimization ([Thesis](#))

Advisors: [Prof. Dhish K. Saxena](#), [Prof. Kalyanmoy Deb](#) and [Prof. Erik D. Goodman](#)

B.Tech. in Mechanical Engineering

Indian Institute of Technology Roorkee, India CGPA : 8.38/10

Jul. 2012 - Jun. 2016

RESEARCH/WORK EXPERIENCE [[LinkedIn](#)]

Applied Mathematics

International Institute of Information Technology (IIIT) Hyderabad
Guest Faculty (Finance)

Dec. 2025 - Present

AI & Digital Transformation

Franklin Templeton Investments, Hyderabad, Telangana, India
Director, AI & Optimization Research

Jun. 2022 - Present

Computational Optimization and Innovation Laboratory

Michigan State University, East Lansing, Michigan, USA
Visiting Researcher (invited by [Prof. Kalyanmoy Deb](#))

Feb. 2020 - Jun. 2020

PUBLICATIONS/PATENTS [see complete list [here](#)]

Patent: System and Method for Engine Cylinder Deactivation
S. Mittal, S. Manocha, P. Pandey and R. Singh

Granted: 436263

Book: Machine Learning Assisted Evolutionary Multi- and Many-Objective Optimization
D.K. Saxena, **S. Mittal**, K. Deb and E.D. Goodman

Springer 2024 ([link](#))

Working Papers:

A Pre-trained Reinforcement Learning Approach to Goals-Based Wealth Management
S. Das, H. Khadilkar, **S. Mittal**, D. Ostrov, D. Srivastav and H. Wang

[Journal, [preprint](#)]

Evolutionary Multi- And Many-objective Optimization: Enhancements using Machine Learning
D.K. Saxena, **S. Mittal**, K. Deb

[Book Chapter, accepted]

Journal Papers:

Interpreting Omega Ratio for Goals Based Wealth Management
H. Khadilkar, **S. Mittal**, S. Gorjala, H. Wang, A. Radhakrishnan and D. Srivastav

JWM 2025 (accepted)

A Unified Innovized Progress Operator for Enhancement in Evolutionary Multi- and Many-objective Optimization
S. Mittal, D.K. Saxena, K. Deb and E.D. Goodman

IEEE TEVC 2023 ([link](#))

A Localized High-Fidelity-Dominance based Many-objective Evolutionary Algorithm
D.K. Saxena, **S. Mittal**, S. Kapoor and K. Deb

IEEE TEVC 2022 ([link](#))

Enhanced <i>Innovized</i> Progress Operator for Evolutionary Multi- and Many-objective Optimization S. Mittal , D.K. Saxena, K. Deb and E.D. Goodman	IEEE TEVC 2021 (link)
A Learning-based <i>Innovized</i> Progress Operator for Faster Convergence in Evolutionary Multi-objective Optimization S. Mittal , D.K. Saxena, K. Deb and E.D. Goodman	ACM TELO 2021 (link)
Social entrepreneurship through forest bioresidue briquetting: An approach to mitigate forest fires in Pine areas of Western Himalaya, India K.K. Joshi, V. Sharma and S. Mittal	Elsevier RSER 2015 (link)

Conference Papers:

Reinforcement learning for Multiple Goals in Goals-Based Wealth Management S. Das, S. Mittal , D. Ostrov, A. Radhakrishnan, D. Srivastav and H. Wang	IEEE AIxB 2024 (link)
Embedding a Repair Operator in Evolutionary Single- and Multi-objective Algorithms K. Deb, S. Mittal , D.K. Saxena and E.D. Goodman	EMO 2021 (link)
A Unified Automated <i>Innovization</i> Framework Using Threshold-based Clustering S. Mittal , D.K. Saxena and K. Deb	IEEE CEC 2020 (link)
A Generic and Computationally Efficient Automated <i>Innovization</i> Method for Power-Law Design Rules K. Garg, A. Mukherjee, S. Mittal , D.K. Saxena and K. Deb	ACM GECCO 2020 (link)
Learning-based Multi-objective Optimization Through ANN-Assisted Online <i>Innovization</i> S. Mittal , D.K. Saxena and K. Deb	ACM GECCO 2020 (link)

PROJECTS

INNOVIZATION: Discovery of Innovative Knowledge through Optimization & ML	Mar. 2019 - Sep. 2023
Funding agency: SPARC , Ministry of Education, Govt. of India	
Role: Core contributor as student researcher (project outcome)	

HIGHLIGHTS

[Keynote] School of Artificial Intelligence & Data Science – IIT Jodhpur	Feb. 2026
[Lecturer]: ACM Winter School 2025 (AI & Finance) – IIIT Hyderabad	Dec. 2025
[Tutorial]: ACM Genetic & Evolutionary Computation Conference – GECCO'25 (Málaga, Spain)	Jul. 2025
[Tutorial]: IEEE Congress on Evolutionary Computation – CEC'25 (Hangzhou, China)	Jun. 2025
[Keynote]: Global Analytics Summit 2024 – AI in Finance (UT Austin, Texas, USA)	Nov. 2024
[Talk]: JOIM Fall Conference – AI in Finance (MIT, Boston, USA)	Oct. 2024
[Invited speaker]: Mahindra Technical Academy (Chennai, India)	Dec. 2019
[Judge]: BAJA-SAE (Indore, India)	Feb. 2019
[Award]: Best Graduate Engineer Trainee (Mahindra Research Valley)	Aug. 2017
[Reviewer]: ACM KDD 2024, IEEE CAI 2024, IEEE CEC 2023, IEEE SSCI 2022, IEEE CEC 2022.	