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Education & Research Experience

- 2023–Present **PhD in Computer Science**
ENS, PSL University & Inria Paris. Supervisors: Dr. Ana Bušić, Prof. Jean-Michel Fourneau
Thesis: Performance Paradoxes and Admission Control in Stochastic Matching Models
- 2020–2023 **MSc in Mathematics**
Shandong University of Technology. Supervisor: Prof. Jianfeng Wang
Thesis: On the Matrix-Tree Theorems of Graphs. Defended: May 2023
- 2015–2019 **BSc in Mathematics and Applied Mathematics**
Shandong University of Technology

Publications

- 2026 **Performance paradox in matching systems**
S. Li, A. Bušić, and J.-M. Fourneau. ROADEF, Tours, France
- 2026 **A graph discretization of vector Laplacian**
S. Li, L. Lu, and J. Wang. Discrete Appl. Math. 379, 446–460
- 2026 **Matrix-Tree Theorems for complex unit gain networks**
S. Li, J. Wang, M. Dehmer, M. Brunetti, and Y. Li. J. Comput. Appl. Math. 488, 117807
- 2026 **ORKM: an R package for online multi-view data clustering**
M. Yu, S. Li, and G. Guo. Neurocomputing, 663, 131973
- 2025 **Performance paradox in matching models with abandonment**
A. Bušić, J.-M. Fourneau, and S. Li. EAI ValueTools, Glasgow, Scotland
- 2025 **Performance paradoxes in matching systems are not that rare**
A. Bušić, J.-M. Fourneau, A. Lunven, and S. Li. NETGCOOP, Bilbao, Spain
- 2023 **A graph discretization of vector Laplace operator**
S. Li, L. Lu, and J. Wang, e-print
- 2023 **Matrix-Tree Theorem of digraphs via signless Laplacians**
S. Li, L. Lu, J. Wang, and W. Wang. Linear Algebra Its Appl. 658, 32–48
- 2023 **On graphs with small ranks: old and new results**
S. Li, Z. Stanić, and J. Wang. Adv. Math. 52(3), 385–405
- 2023 **Yet more elementary proof of Matrix-Tree Theorem for signed graphs**
S. Li and J. Wang. Algebra Colloq. 30(03), 493–502

2017 **Equivalence relation and function**
S. Li and H. Li. Int. J. Trend Res. Dev. 4(6)

Accepted **State space truncation and admission control for matching systems**
A. Bušić, J.-M. Fourneau, and S. Li

Submitted **Greedy failure and a stabilizing partial group discipline on a nested hypergraph**
S. Li, A. Bušić, and J.-M. Fourneau

Submitted **On the spectral radius of trees with fixed eccentric sequence**
S. Li, M. Yu, and Y. Özer

Presentations

2026 **Steady-State Performance Paradoxes in Stochastic Matching Networks with Abandonment**
LINCS Annual Workshop with the Scientific Committee, Palaiseau, France

2026 **Performance paradox in matching systems**
27ème Congrès Annuel de la Société Française de Recherche Opérationnelle et d'aide à la Décision (ROADEF2026), Tours, France

2025 **Performance paradox in matching models with abandonment**
18th EAI International Conference on Performance Evaluation Methodologies and Tools (EAI VALUETOOLS2025), Glasgow, Scotland

2025 **Performance paradoxes in matching systems are not that rare**
The 12th International Conference of Networks, Games, Control and Optimization (NETGCOOP2025), Bilbao, Spain

2025 **Performance paradoxes in matching systems are not that rare**
LINCS Annual Workshop with the Scientific Committee, Palaiseau, France

2024 **A Brief Survey on the Matrix-Tree Theorems of Graphs**
Argo Seminar, Paris, France

2023 **On the Matrix-Tree Theorems of Graphs**
The Third SDUT Postgraduate Academic Forum, Zibo, China

2022 **On graphs with small ranks: old and new results**
The 10th Int'l Combinatorics and Graph Theory Conference (CMS-CGT2022), Harbin, China

2022 **A Survey on Matrix-Tree Theorem of Graphs**
The 9th Int'l Symposium on Graph Theory and Combinatorial Algorithms (ORSC-GTCA2022), Hangzhou, China

Academic Service

Editor/Reviewers

2026–Present Mathematical Reviews (MathSciNet)

2025–Present Zentralblatt MATH (zbMATH)

2025–Present Journal of Advances in Engineering and Technology

Peer Review

Jrnl.	Discrete Applied Mathematics / IEEE Internet of Things Magazine / Asian Journal of Mathematics and Computer Research / Mathematics and Computer Science / Journal of Advances in Mathematics and Computer Science
2025 Confs.	ICECET / GPS / ICIC / ACDSA / ICECCME
2026 Confs.	ICECET / ACDSA / INCOSST

Professional Memberships

2023–Present	The International Linear Algebra Society (ILAS) / Société Mathématique de France (SMF) / Société informatique de France (SiF) / Société de Mathématiques Appliquées et Industrielles (SMAI) / Laboratory for Information, Networking and Communication Sciences (LINCS)
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Brief Profile

I am a Ph.D. candidate in the ARGO team at Inria Paris and the Département d’Informatique de l’ENS (DI ENS, Université PSL), advised by Dr. Ana Bušić and Prof. Jean-Michel Fourneau. My research focuses on stochastic matching models, at the intersection of algorithms, optimization, and learning theory.

Before my doctoral studies, I earned an M.Sc. in Graph Theory, where I worked on connections between graph structures and graph matrices, including the Matrix-Tree Theorem, low-rank graph families, and the vector Laplacian on graphs, in collaboration with Prof. Jianfeng Wang, Dr. Ning Bian, and other researchers. I also hold a B.Sc. in Applied Mathematics, through which I developed a strong foundation in linear algebra, number theory, and modern algebra. Beyond my thesis, I am interested in connecting theoretical insights with practical problems in computer science and mathematics.