

MOSHE SIPPER, Ph.D., Résumé

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Employment

2008–	Professor	Department of Computer Science, Ben-Gurion University
2016–2020	Visiting Professor	Institute for Biomedical Informatics, University of Pennsylvania
2001–2008	Associate Professor	Department of Computer Science, Ben-Gurion University
2001–2001	Senior Lecturer	Department of Computer Science, Ben-Gurion University
2001–2005	Visiting Professor	Logic Systems Laboratory, EPFL
1995–2001	Senior Researcher	Logic Systems Laboratory, EPFL
1993–1995	Instructor	Department of Computer Science, Tel Aviv University
1991–1993	Teaching Assistant	Department of Computer Science, Tel Aviv University

Degrees

Ph.D. + M.Sc. (*magna cum laude*), Computer Science, Tel Aviv University; B.A., Computer Science (*cum laude*), Technion

Publications

Author of 210+ papers

Author of 50+ Medium articles

Author of 7 books, fiction and nonfiction

Honors

2021 Cited as one of “5 Scientists At The Forefront Of Computing And AI” by Ezvid Wiki

2020 In top 2% Mendeley list

2020 Cited as a top scientist by Research.com

2015 IEEE CIS Outstanding TCIAIG Journal Paper Award: “Evolutionary design of FreeCell solvers”

2013 Gold Award, “HUMIES” Awards for Human-Competitive Results Produced by Genetic and Evolutionary Computation, “Evolutionary design of FreeCell solvers”

2013 place, Student Workshop at GECCO 2013, “From size perception to counting: An evolutionary computation point of view”

2011 Outstanding Researcher Award, Faculty of Natural Sciences, Ben-Gurion University

2011 Gold Award, “HUMIES” Awards, “GA-FreeCell: Evolving solvers for the game of FreeCell”

2009 Bronze Award, “HUMIES” Awards, “GP-Rush: Using genetic programming to evolve solvers for the Rush Hour puzzle”

2008 Bronze Award, “HUMIES” Awards, “Evolving an automatic defect classification tool”

2008 BGU Toronto Prize for Academic Excellence in Research

2007 Silver Award, “HUMIES” Awards, “Evolution of an efficient search algorithm for the mate-in-n problem in chess”

2005 Bronze Award, “HUMIES” Awards, “Attaining human-competitive game playing with genetic programming”

1999 EPFL Latsis Prize

Students

Supervision of close to 40 graduate students

Grants

- 2024 Israel Data Science and AI Initiative — IDSAI (USD 5K)
Title: *Identifying Casualties through Deep Learning*
- 2023-2024 Data Science Research Center (USD 24K)
Title: *Evolutionary-Based Adversarial Attacks*
- 2022-2025 Israeli Innovation Authority, Trust.AI Consortium (USD 376K)
Title: *Adversarial Attacks and Defenses for Computer Vision and Tabular AI Models*
- 2021-2022 Data Science Research Center (USD 27K)
Title: *Source-Code Evolution: Closing the Gap Towards the Evolution of Entire Programs*
- 2016-2020 Israel Science Foundation, Grant no. 856/16 (USD 260K)
Title: *Evolutionary-Based Payout for Scenario-Based Specifications*
- 2011-2016 Israel Science Foundation, Grant no. 123/11 (USD 250K)
Title: *Evolution of Java Bytecode and Programs through Genetic Programming*
- 2005-2010 Ministry of Trade and Industry, IMG4 Consortium (USD 1.1M)
Title: *4th Generation Imaging Machines (IMG4)*
- 2006-2007 Ben-Gurion University, Grant no. 82472110 (USD 6K)
Title: *Finding Common RNA Motifs using Genetic Programming*
- 2004-2005 Ben-Gurion University, Grant no. 82288110 (USD 5K)
Title: *Applying Genetic Programming and Meta-Reasoning to the Development and Analysis of Game Strategies*
- 2002-2003 Ben-Gurion University, Grant no. 82153101 (USD 5K)
Title: *Bio-Inspired Computing*
- 2001-2005 Swiss National Science Foundation, Grant no. 620-062734 (CHF 1.35M)
Title: *SNF (Swiss National Science Foundation) Professorship*
- 1999-2002 Swiss National Science Foundation, Grant no. 2000-055597.98 (CHF 213K)
Title: *Cellular Programming: Programming Massively Parallel Cellular Machines by Means of Coevolution (2nd Extension)*
- 1997-1999 Swiss National Science Foundation, Grant no. 2000-049349.96 (CHF 270K)
Title: *Cellular Programming: Programming Massively Parallel Cellular Machines by Means of Coevolution (Extension)*
- 1996-1997 Swiss National Science Foundation, Grant no. 2100-045630.95 (CHF 72K)
Title: *Cellular Programming: Programming Massively Parallel Cellular Machines by Means of Coevolution*

Service

Associate Editor, *Genetic Programming and Evolvable Machines*

Past Associate Editor: *IEEE Transactions on Computational Intelligence and AI in Games*, *Memetic Computing*, *IEEE Transactions on Evolutionary Computation*

Co-chair, GPTP-2015 — Genetic Programming Theory and Practice (GPTP) Workshop, Ann Arbor, USA

Program Co-chair, 2014 IEEE Conference on Computational Intelligence and Games (IEEE CIG 2014)

Co-organizer, EvoRobocode Competition, GECCO 2012 and GECCO 2013

Co-chair, *Search-Based Software Engineering (SBSE) Track at 2011 Genetic and Evolutionary Computation Conference (GECCO)*

Member, Steering Committee, *International Conference on Evolvable Systems: From Biology to Hardware (ICES)* series

Co-chair, *Workshop on Modeling of Complex Systems by Cellular Automata*

Program Chair, *2nd International Conference on Evolvable Systems: From Biology to Hardware (ICES98)*

Member of close to 150 conference-program committees

Referee for close to 40 journals and funding agencies

Plenary and tutorial speaker at several conferences

Various internal university appointments, including several years as departmental graduate studies chair