Youhei Akimoto University of Tsukuba, Japan

BIOGRAPHY

Academic Background:

Doctor of Engineering, Tokyo Institute of Technology, 2011, Computational Intelligence.

Professional Experience:

Associate Professor, University of Tsukuba, Japan, 2018 – Present; Assistant Professor, Shinshu University, Nagano, Japan, 2013 – 2018; Postdoctoral Research Fellow, Inria, Orsay, France, 2011 – 2013.

Professional Interest:

Evolutionary Computation, Reinforcement Learning, Automated Machine Learning.

ACM Activities:

ACM TELO Associate Editor, SIGEVO, 2019 – Present; GECCO Student Workshop Organizer, SIGEVO, 2018 – 2019; GECCO Continuous Optimization Track Chair, SIGEVO, 2015 – 2016.

Membership and Offices in Related Organizations:

Editorial Board Member, Evolutionary Computation Journal, 2019 – Present; Executive Committee, The Japanese Society for Evolutionary Computation, 2018 – 2022.

Awards Received:

Best Paper Award, FOGA 2019, ACM SIGEVO, 2019; Best Paper Award, GECCO 2018 ENUM Track, ACM SIGEVO, 2018; Best Reviewer Award, NIPS 2017, 2017; Young Researcher Award, IEEE CIS Japan Chapter, 2011.

STATEMENT

I am honored to run for the SIGEVO Executive Committee. Two SIGEVO conferences, GECCO and FOGA, have been my primary publication venues since the beginning of my research life. In addition to contributing to the SIGEVO community by publishing my best research results in these venues, I have been contributing to the community as: a program committee member of GECCO and FOGA, a track chair and a student workshop organizer at GECCO, an associate editor for ACM TELO, as well as contributing to related conferences / journals as a researcher and a reviewer.

If elected, I would like to try to encourage students and young researchers in the evolutionary computation field to broaden the influence of the community like other fields of artificial intelligence and to promote the sound development of the community.

Anne Auger Inria, Saclay, France

BIOGRAPHY

Professional Experience:

Research Director, Inria, Saclay, France, 2019 – Present; Permanent Researcher, Inria, Saclay, France, 2006 – 2009; Postdoctoral Researcher, ETH Zurich, Zurich, Switzerland, 2004 – 2006.

Professional Interest:

Evolutionary computation, numerical optimization, stochastic optimization, multiobjective optimization.

ACM Activities:

Business Committee member, SIGEVO, 2021 – Present; Executive Committee member, SIGEVO, 2012 – Present; General chair, ACM GECCO conference, 2019 – 2019.

Awards Received:

SIGEVO Impact Award, 2020.

STATEMENT

I am honored to have been nominated as a candidate for the Executive Committee in the 2023 ACM SIGEVO Election. I have been a member of the SIGEVO executive board since 2012. I served as General chair for the GECCO conference in 2019 and as a business committee member for 2022 and 2023. Prior to that, I served several years as track chair.

The ACM GECCO conference is the largest conference in Evolutionary Computation, maintaining a high-quality publication. One of the tasks of the SIGEVO executive committee is to operate the conference.

If elected to the SIGEVO executive committee, I will continue to invest my time to ensure that GECCO remains a top conference in the EC field while adapting to the current challenges due to climate change and the evolution of work habits.

Francisco Chicano University of Malaga, Spain

BIOGRAPHY

Academic Background:

Ph.D., University of Malaga, 2007, Computer Science.

Professional Experience:

Associate Professor, University of Malaga, Spain, 2017 – Present; Open Ended Ph.D. Assistant Professor, University of Malaga, Spain, 2010 – 2017; Ph.D. Assistant Professor, University of Malaga, Spain, 2009 – 2010.

Professional Interest:

Evolutionary Computation, Combinatorial Optimization (including Multi-objective Optim.), Quantum Computing, Search-Based Software Engineering, Smart Cities.

ACM Activities:

Area Editor, ACM Transactions on Evolutionary Learning and Optimization, 2022 – Present; Selection Committee, SIGEVO Dissertation Award, 2020 – Present; Poster Chair, Genetic and Evolutionary Computation Conference, 2023; Editor-in-Chief, Genetic and Evolutionary Computation Conference, 2021.

Membership and Offices in Related Organizations:

Treasurer, SPECIES (Soc. for the Promotion of EC in Europe and Surr.), 2022 – Present; Associate Editor, Engineering Applications of Artificial Intelligence, 2019 – Present; Editorial Board, Evolutionary Computation (MIT Press), 2016 – Present.

Awards Received:

Best paper in EvoCOP, 2019; Best paper in ECOM Track of GECCO, 2018; Best paper in GA Track of GECCO, 2018; Best paper in EvoCOP, 2012.

STATEMENT

I am honored to be nominated to the SIGEVO Executive Committee. During my research career (20 years), I have focused on Evolutionary Computation, designing new algorithms and operators, as well as applying EC to problems in Software Engineering and Smart Cities.

I am an active researcher in the field, attending GECCO every year since 2007 and taking part in the organization of EC events. In particular, I played many roles in the organization of GECCO and EvoStar.

As a member of the SIGEVO Executive Committee, I would like to contribute, at least, to the following items:

- In the context of the AI spring we are living in, we should find more connections with the broader AI community. EC has a lot to offer to improve algorithms used in other AI fields, and EC can benefit from other AI techniques.
- There is a great opportunity to transfer the knowledge gained in the EC community to quantum computing. Quantum computing algorithms share the same stochastic nature as EC and many of the ideas used in EC could be transferred to QC.
- Proposing new activities and programs to make the EC community even more active. For example, funding short research stays.

Carlos Artemio Coello

IEEE Transactions on Evolutionary Computation, USA

BIOGRAPHY

Academic Background:

Ph.D., Tulane University, 1996, Computer Science.

Professional Experience:

Editor-in-Chief, IEEE Transactions on Evolutionary Computation, USA, 2021 – Present; Professor with Distinction of Computer Science, CINVESTAV-IPN, Mexico, 2001 – Present:

Adjunct Director (Computer Science), Unité Mixte Internationale (UMI) LAFMIA 3175 CNRS, Mexico, 2008 – 2018.

Professional Interest:

Evolutionary algorithms, Multiobjective optimization, Bio-inspired metaheuristics.

ACM Activities:

Member of the Executive Committee, SIGEVO, 2017 – 2023; General Chair, Genetic and Evolutionary Computation Conference (GECCO 2020).

Membership and Offices in Related Organizations:

Member-at-Large of AdCom, IEEE Computational Intelligence Society, 2016 – 2018; Vice President for Member Activities, IEEE Computational Intelligence Society, 2019 – 2020;

IEEE Press Liaison, IEEE Computational Intelligence Society, 2016 – 2019.

Awards Received:

IEEE CIS Evolutionary Computation Pioneer Award, 2021; The World Academy of Sciences Award (Engineering Sciences), 2016; IEEE Kiyo Tomiyasu Award, 2013; IEEE Fellow, 2011.

STATEMENT

I would like to continue as a member of the Executive Committee so that I can continue to contribute to SIGEVO in any way required. I would like to provide my previous experience as a member of the SIGEVO Executive Committee for 6 years. I also would like to share my experience as a member of several committees within the IEEE Computational Intelligence Society as well as General Chair of the Genetic and Evolutionary

Computation Conference. Also, as a Latin American, I would like to foster the participation of members of my region in ACM SIGEVO-related activities.

Jonathan Fieldsend University of Exeter, UK

BIOGRAPHY

Academic Background:

Ph.D., University of Exeter, 2003, Computer Science.

Professional Experience:

Professor of Computational Intelligence, University of Exeter, UK, 2020 – Present; Associate Professor of Computational Intelligence, University of Exeter, UK, 2016 – 2020; Senior Lecturer of Computer Science, University of Exeter, Exeter, UK, 2014 – 2016.

Professional Interest:

Multi-objective optimization, Fitness landscape visualization, Robust and uncertain optimization, The interface of evolutionary computation and machine learning Expensive optimization.

ACM Activities:

Editor-in-Chief, GECCO, 2022;

Dissertation Awards Selection Committee, ACM SIGEVO, 2020 – Present;

Co-Chair, EMO Track, GECCO, 2019 – 2020;

Associate Editor, ACM TELO, 2029 – Present.

Membership and Offices in Related Organizations:

Associate Editor, IEEE TEvC, 2021 – Present:

Vice-Chair, IEEE CIS Task Force on Multi-Modal Optimization, 2020 – Present;

Vice-Chair, IEEE CIS Task Force on Data-Driven Evolutionary Optimization of Expensive Problems, 2016 – Present.

Awards Received:

Best Paper Award in RWA track, GECCO, 2014;

Best Paper Award in EMO Track, GECCO, 2013;

Best Paper Award (overall conference award), IPSI, 2016.

STATEMENT

I am honored to be considered to join the SIGEVO Executive Committee. I have been contributing work to GECCO since 2011 and co-organizing workshops at GECCO since 2013. I have been a GECCO Track Chair and was Editor-in-Chief of the first hybrid

GECCO last year in Boston. I have also sat on the ACM SIGEVO Dissertation Awards Selection Committee since its creation in 2020.

The recent transition to online and latterly the hybrid conferences has not been without its challenges; however, it has enabled a much greater range of engagement between colleagues in different research environments and access to different levels of funding to collaborate, engage and learn from one another to an extent which was not possible previously. I'm very keen that we build on this opportunity to engage with the full breadth of colleagues that span SIGEVO's remit. I am also keen to focus on the links with interfacing research areas such as machine learning and promote reproducible and verifiable science, which is gaining traction in the community but is still not ubiquitous.

I'm committed to ensuring ACM SIGEVO continues to both evolve and support the community and its wider success.

Franz Rothlauf University of Mainz, Germany

BIOGRAPHY

Academic Background:

Habilitation, University of Mannheim, 2007, Design and Application of Modern Heuristics.

Professional Experience:

Full Professor, University of Mainz, Germany, 2006 – Present; Assistant Professor, University of Mannheim, Germany, 2002 – 2006; Teaching and Research Assistant, University of Bayreuth, Germany, 1997 – 2002.

Professional Interest:

Evolutionary Computation, Program Synthesis, Genetic Programming, Decision Support Systems, Machine Learning Models.

ACM Activities:

Chair, SIGEVO, 2019 – Present; Treasurer, SIGEVO, 2011 – 2019; General Chair GECCO, SIGEVO, 2009.

STATEMENT

SIGEVO and the GECCO conferences are well established and visible in the evolutionary computation community. Our community is attractive for students and young researchers, and evolutionary computation techniques are used as standard problem solvers in many industrial applications. However, there are still open challenges which I want to address as a SIGEVO officer:

- 1) to increase the visibility of SIGEVO (as well as the corresponding conferences and journals) to other scientific communities. Especially important are computer science (including other machine learning fields like neural networks), operations research, engineering, and evolutionary biology. Suitable instruments are, for example, cooperation with other ACM SIGs.
- 2) to intensify the cooperation and coordination with other professional evolutionary computation societies. It is important to bridge gaps between different groups and opinions and strengthen the overall community.

3) to continue and improve the hybrid nature of GECCO. Running GECCO in a hybrid format increases the inclusiveness as participation is also possible with limited financial funds, high travel costs or other reasons that make traveling difficult. Furthermore, running GECCO in a hybrid format reduces carbon dioxide emissions and allows us to save our future.

Sara Silva University of Lisbon, Portugal

BIOGRAPHY

Academic Background:

Ph.D., University of Coimbra, 2008, Genetic Programming.

Professional Experience:

Principal Investigator, Faculty of Sciences, University of Lisbon, Portugal, 2014 – Present:

Assistant Researcher, INESC-ID, Tecnico Lisboa, Lisbon, Portugal, 2009 – 2013; Invited Assistant Researcher, CISUC, University of Coimbra, Coimbra, Portugal, 2008 – 2018.

<u>Professional Interest:</u>

Evolutionary Computation, Evolutionary Machine Learning, Remote Sensing, Bioinformatics, Optimization.

ACM Activities:

GECCO General Chair, SIGEVO, Present; ACM TELO Associate Editor, 2019 – Present; GECCO GP Track Chair, SIGEVO, 2017 – 2018; GECCO Editor-in-Chief, SIGEVO, 2015.

Membership and Offices in Related Organizations:

Member of the Executive Committee, SPECIES Society, 2020 – 2022; Program Chair, EuroGP, 2011 – 2012; Member of the Steering Committee, EuroGP, 2010 – Present.

Awards Received:

Best Poster Award, ESWC, 2021:

EvoStar Award for Outstanding Contribution to EC, SPECIES, 2018;

Best Paper Award, EuroGP, 2014;

ESRI Award for Best Scientific Paper in GIS, ASPRS, 2001.

<u>STATEMENT</u>

Evolutionary computation (EC) has powerful algorithms for solving problems of optimization, machine learning (ML), and more. Nevertheless, it is still unknown in many scientific domains and clearly regarded as an outsider by the wider ML community.

My interdisciplinary experience has connected me with a variety of scientific communities, where I have contributed work that showcases the versatility and power of EC. I have written and still maintain GPLAB, a genetic programming toolbox for the worldwide used scientific software MATLAB. GPLAB itself has been downloaded more than 65,000 times. I have co-authored a recent book on intelligent systems where EC is given the importance it deserves alongside other more popular algorithmic flavors.

As PC member of large general ML conferences, I observe a rising number of EC-related submissions; Google has now "discovered" EC in its AutoML-Zero. The visibility and credibility of EC are improving, but very slowly.

Being General Chair of GECCO-2023 provides me with insight and a new appreciation for SIGEVO's executive matters. I feel that, if elected, I would be well positioned to help SIGEVO in different roles, and better supported to continue my efforts in promoting EC in the wider scientific community.

Lee Spector Amherst College, Amherst, MA, USA

BIOGRAPHY

Academic Background:

Ph.D., University of Maryland, College Park, 1992, Computer Science.

Professional Experience:

Professor of Computer Science, Amherst College, Amherst, MA, USA, 2019 – Present; Adjunct Professor of Computer Science, University of Massachusetts, Amherst, MA, USA, 2007 – Present;

Professor of Computer Science, Hampshire College, Amherst, MA, USA, 1992 – 2022.

Professional Interest:

Evolutionary Computation, Artificial Intelligence, Cognitive Science, Quantum Computation, Artificial Life.

ACM Activities:

Executive Committee member, ACM SIGEVO, 2005 – Present; Associate Editor, ACM Transactions on Evolutionary Learning and Optimization, 2019 – present.

Membership and Offices in Related Organizations:

Senior Member, IEEE, 2013 – Present;

Member, International Society of Artificial Life, 2021 – present.

Awards Received:

Best paper, EuroGP, 2020;

Best paper, Genetic Programming track, GECCO, 2019;

Fellow International Society for Genetic and Evolutionary Computation, 2004;

NSF Director's Award for Distinguished Teaching Scholars, 2003.

STATEMENT

I would be honored to serve another term on the SIGEVO Executive Committee, on which I have served since its formation. I served on the ISGEC Board before SIGEVO was established, and in several capacities for GECCO, including Proceedings Editor-in-Chief. I also serve the field in my role as Editor-in-Chief of the journal Genetic Programming and Evolvable Machines.

In addition to my field-specific expertise I bring broader experience including background in cognitive science, philosophy, and art, an emphasis on teaching undergraduates, and service in academic administration including work as a dean. I believe that this breadth has allowed me to make unique contributions to SIGEVO.

Our field is making great strides both in theoretical understanding and in practical results. It is poised to make even more significant and conspicuous contributions to several areas of science and engineering in the near future. In order to take advantage of this moment we must guide the field in ways that maintain and strengthen its scientific integrity, while also remaining open to innovation and creativity. I would be pleased to contribute to this effort through another term on the Executive Committee.

Heike Trautmann University of Münster, Germany

BIOGRAPHY

Academic Background:

Habilitation, TU Dortmund University, Dortmund, 2013, Statistics and Multiobjective Optimization.

Professional Experience:

Professor of Data Science: Statistics and Optimization, University of Münster, Germany, 2013 – Present;

Adjunct Professor of Data Science, University of Twente, The Netherlands, 2021 – 2026; Postdoctoral Researcher, TU Dortmund University, Dortmund, Germany, 2004 – 2013.

Professional Interest:

Human-Centered Artificial Intelligence and Data Science, Evolutionary Computation Exploratory Landscape Analysis, Multiobjective Optimization, Automated Algorithm Selection and Configuration.

ACM Activities:

GECCO Tutorial Chair, SIGEVO, 2022;

Associate Editor ACM TELO, SIGEVO, 2020 - 2021;

GECCO Track Chair Evolutionary Multiobjective Optimization, SIGEVO, 2015 – 2016; FOGA Program Committee, SIGEVO, 2013 – 2022.

Membership and Offices in Related Organizations:

Associate Editor IEEE Transactions on EC, IEEE, 2021 – 2022;

Associate Editor Evolutionary Computation Journal, MIT Press, 2017 – 2022;

Director, European Research Center for Information Systems, 2013 – 2022.

Awards Received:

ACM SIGEVO Impact Award, 2021;

Nominated for FOGA Best Paper Award, 2021;

PPSN Best Paper Award, 2016;

GECCO Best Paper Award Evolutionary Multiobjective Optimization, 2012.

STATEMENT

As a Professional ACM and SIGEVO member for five years, I feel honored to have been asked to serve as a candidate for the SIGEVO Executive Committee. I am a Professor of

"Data Science: Statistics and Optimization" at the Information Systems Department of the University of Münster, Germany, an Adjunct Professor of Data Science at the University of Twente, NL, and Director of the European Research Center for Information Systems (ERCIS). As a key supporter of CLAIRE (Confederation of Laboratories for Artificial Intelligence Research in Europe), I am primarily concerned with human-centered and trustworthy AI, automated algorithm selection and configuration, evolutionary computation, exploratory landscape analysis, and decision support methods in multi-objective (evolutionary) optimization. I am contributing to the Evolutionary Computation community in a very active manner, e.g. by serving as associate editor of the Evolutionary Computation Journal, the ACM Transactions on Evolutionary Learning and Optimization, as well as the IEEE Transactions on Evolutionary Computation. Within the designated role, I plan to intensively engage in this leading special interest group of the EC domain to contribute to the success of GECCO and other related EC conferences as well as to endeavors supporting EC researchers in terms of appreciation, funding, and equal opportunities.