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NEWS RELEASE

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ACM Publishes First Issue of New Journal on Evolutionary Computing

ACM TELO Aims to Bridge Machine Learning and Optimization Fields

New York, NY, September 7, 2021 – ACM, the Association for Computing Machinery, published the inaugural issue of *ACM Transactions on Evolutionary Learning and Optimization (TELO)*, a new journal covering the exciting field of evolutionary computation. The first issue of TELO will be freely available on a permanent basis.

Evolutionary computation is a subfield of artificial intelligence and draws inspiration from the principles of biological evolution in order to solve optimization problems and create efficient algorithms, software and hardware systems. The field has grown into a large and successful discipline with thousands of researchers and two professional organizations: the ACM Special Interest Group on Genetic and Evolutionary Computation (SIGEVO), to which the journal is linked, and the IEEE Computational Intelligence Society.

TELO will publish high-quality original papers in all areas of evolutionary computation and related subjects such as population-based methods, Bayesian optimization, and swarm intelligence. The editorial board is also interested in papers relating to the practical application of EC, including but not limited to areas such as logistics, scheduling, healthcare, games, robotics, software engineering, feature selection, clustering, as well as the open-ended evolution of complex systems.

"This new journal is certainly timely, as EC is used today to solve many of the most challenging optimization problems in almost every industry sector, explained *TELO* Co-EIC Darrell Whitley, Colorado State University. "While EC has matured, it also remains vibrant, flexible and open to new developments. We welcome papers that make solid contributions to theory, method and applications. Our vision is to make *TELO* a home for the entire EC community."

"One of the big trends in recent times has been the rise of machine learning, and we believe that EC and machine learning are closely linked in many different ways," added *TELO* Co-EIC Jürgen Branke, University of Warwick. "We are particularly interested in publishing papers at the intersection of

optimization and machine learning. Examples of this include the use of evolutionary optimization for tuning and configuring machine learning algorithms, machine learning to support and configure evolutionary optimization, and hybrids of evolutionary algorithms with other optimization and machine learning techniques."

To ensure high-quality standards, papers submitted to *TELO* for publication will go through a rigorous double-blind reviewing process, wherein an associate editor will provide one of the reviews. Furthermore, the editorial board hopes to contribute to the sustainability of the field by encouraging authors to make their code publicly available and will award ACM Reproducibility Badges to papers in the three categories of "Artifacts Available" (source code available in public archival repository), "Artifacts Evaluated" (documented, complete and exercisable), and "Results Reproduced" (results can be obtained from provided code).

In addition to Co-EICs Branke and Whitley, the *TELO* editorial team is drawn from countries around the world and includes 35 associate editors, eight area editors, a three-person advisory board, and a 10-member reproducibility board.

About ACM
ACM, the Association for Computing Machinery, is the world's largest educational and scientific computing society, uniting computing educators, researchers and professionals to inspire dialogue, share resources and address the field's challenges. ACM strengthens the computing profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.

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