



Call for Papers: RAISE 2019

7th International Workshop on Realizing Artificial Intelligence Synergies in Software Engineering

Montreal, Canada, May 28th, 2019 (In Conjunction with ICSE 2019)

<http://promisedata.org/raise/2019>

RAISE'19 is a **crossover event** where the state of the art in SE+AI documented and extended. This workshop will explore not only the application of AI techniques to SE problems but also the application of SE techniques to AI problems. Software has become critical for realizing functions central to our society. For example, software is essential for financial and transport systems, energy generation and distribution systems, and safety-critical medical applications. Software development costs trillions of dollars each year yet, still, many of our software engineering methods remain mostly manual. If we can improve software production by smarter AI-based methods, even by small margins, then this would improve a critical component of the international infrastructure, while freeing up tens of billions of dollars for other tasks. Accordingly, the question that motivates and drives this workshop is:

Are SE and AI researchers ignoring important insights from AI and SE?

Prospective participants are expected to submit either a regular research paper with late-breaking research results or a research vision/position statement on one or more of the following perspectives:

Topics of interest:

- 1. Improving SE through AI** – including but not limited to knowledge acquisition, knowledge representation, reasoning, agents, machine learning, machine-human interaction, planning and search, optimization, search-based algorithms, natural language understanding, problem solving and decision-making, understanding and automation of human cognitive tasks, AI programming languages, reasoning about uncertainty, new logics, statistical reasoning, software analytics, etc.
- 2. Applying AI to SE activities** – including but not limited to requirements, design, software architecture, specification, traceability, program understanding, model-driven development, testing and quality assurance, domain-specific software engineering, adaptive systems, software evolution, etc.
- 3. SE for AI** – including but not limited to AI programming languages, program derivation techniques in AI domains, platforms and programmability, software architectures, concurrency, rapid prototyping and scripting for AI techniques, software engineering infrastructure for reflective and self-sustaining systems, etc.
- 4. Deployed Applications of AI or SE** – papers that describe a deployed SE application in AI domain or an AI application in SE domain including but not limited to robotics software development, recommendation systems, API learning, programming in natural language, speech interfaces, digital assistants, etc.

Paper Submission:

Submit papers (PDF) to [EasyChair](#). Full papers will be five to seven pages long (including references) and can either be position statements that review state-of-the-art results, present new results, or provide a vision for the future. Each accepted paper will be presented in 15-20 minute presentation followed by a discussion. Submissions must not be published or under review elsewhere, and conform to the IEEE Conference Proceedings Formatting Guidelines (title in 24pt font and full text in 10pt type, LaTeX users must use `\documentclass[10pt,conference]{IEEEtran}` without including the `compsoc` or `compsocconf` option). Submission length must not exceed the above page limits and all submissions must be in English. The official publication date of the workshop proceedings is the date the proceedings are made available in IEEE Library. This date may be up to two weeks prior to the first day of ICSE 2019. The official publication date affects the deadline for any patent filings related to published work.

Journal Special Issue:

Following on from the workshop, there will be a special journal issue on “Empirical Methods for SE+AI applications” at the Empirical Software Engineering journal. This will be an open call to the general community but RAISE'19 authors are especially encouraged to submit papers.

Important Dates:

Paper Submission: February 1, 2019

Notification: March 1, 2019

CR paper: March 15, 2019

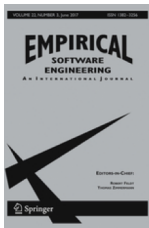
Workshop date: May 28, 2019

Keynote Speakers:

Jane Cleland-Huang, Notre Dame Uni., US
Tom Zimmermann, Microsoft Research, US

Journal Special Issue:

There will be a special journal issue on “Empirical Methods for SE+AI applications” at the **Empirical Software Engineering** journal.



Workshop Chairs:

Tim Menzies, NCSU, US

Burak Turhan, Monash University, Australia

Organizing Committee:

Cetin Mericli, CMU, US

Leandro Minku, Uni. of Leicester, UK

Andriy Miransky, Ryerson Uni., Canada

Walter F. Tichy, KIT, Germany

Program Committee:

Ayse Bener, Ryerson Uni, Canada

Ebrahim Bagheri, Ryerson Uni., Canada

Francisco Chicano, Uni. of Malaga, Spain

Jane Cleland-Huang, Notre Dame Uni., US

Massimiliano Di Penta, Uni. of Sannio, Italy

Davide Fucci, Uni. of Hamburg, Germany

Jacky Keung, City Uni, Hong Kong

Marjan Mernik, Uni. Of Maribor, Slovenia

Leon Moonen, SIMULA, Norway

Daniel Rodriguez, Uni. of Alcalá, Spain

Alessandra Russo, Imperial College, UK

Richard Torkar, Chalmers Uni., Sweden

Ayse Tosun, ITU, Turkey

Alexander Wachtel, KIT, Germany

Shin Yoo, SUST, China

Yangfan Zhou, Fudan Uni, China