

Project abstract

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PROJECT PROPOSAL

Artificial intelligence has the potential to substantially improve medical care – from earlier detection of disease to more precise treatment decisions and follow-up. Despite rapid technical advances, however, many AI algorithms in healthcare do not yet address the most urgent clinical needs. Research efforts are frequently shaped by the availability of data rather than by the importance of the underlying medical problem.

Medical Imaging AI's Last Exam (MEDAL) is an international initiative designed to address this gap. MEDAL seeks to redefine how progress in medical AI is evaluated. Instead of concentrating on narrowly defined, routine tasks, the project aims to establish a globally relevant benchmark built around high-impact clinical questions. Through a large-scale global crowdsourcing campaign, experts worldwide are invited to submit clinically meaningful challenges together with corresponding imaging data. An international, multidisciplinary expert panel will identify those tasks whose solution would have clear relevance for patient care.

MEDAL's objective is to establish a rigorous and internationally recognized "final exam" for medical AI. This benchmark will assess whether advanced AI models can reliably address complex, high-stakes clinical scenarios and demonstrate meaningful clinical utility. By aligning AI development with the most pressing medical challenges, MEDAL aims to foster measurable progress in healthcare and strengthen the patient-centered orientation of future AI models.

To support this effort, MEDAL is seeking an outstanding clinical lead to guide the clinical perspective within the multidisciplinary consortium, support the structuring and prioritization of relevant clinical problems, and contribute to the assessment of clinical relevance across the benchmark.



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