Workshop on the Scaling Behavior of Large Language Models

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Why?

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- But not for all tasks and scenarios: **Inverse Scaling**
  - Performance decreases as model size increases
    - Social biases
    - Unwanted memorization
    - Incorrect reasoning on OOD Python code
    - Compositional generalization failures
    - ...and so on

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  - Scale parameter: not just model size
    - E.g. number of languages, number of domains
  - Performance measure: not just accuracy
    - E.g. calibration, uncertainty, internal characteristics
  - Prompting strategy: not just direct zero-shot
    - E.g. number of in-context examples, number of chain-of-thought "reasoning" steps

Submissions

- 9 submissions

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- 14 reviewers

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- 4 accepted

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- 1 best paper

Keynote talks

Ian McKenzie

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Lead organizer of the Inverse Scaling Prize and first author of the associated paper, currently he is a contracting Research Engineer on OpenAI's Dangerous Capability Evaluations project.

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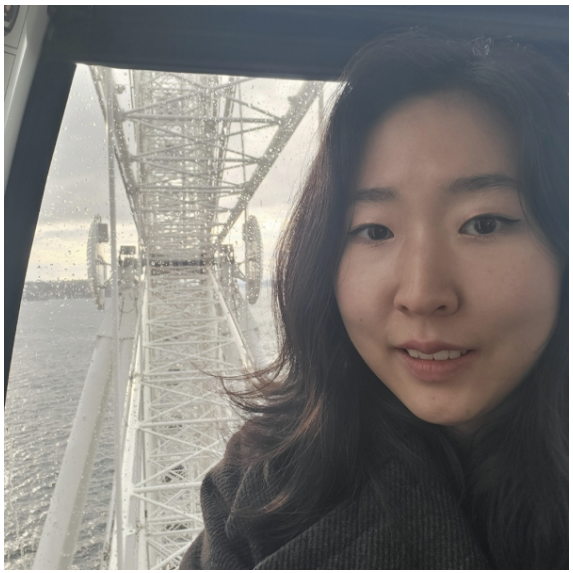
Inverse Scaling: When Bigger isn't Better

Keynote talks

Najoung Kim

Keynote talks



Najoung Kim

Assistant Professor at Boston University and a researcher at Google. She is also one of the authors of the Inverse Scaling Prize paper as well as other foundational works in this field.

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Inverse scaling: mitigation strategies and open questions

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UKRI Research Node on Trustworthy Autonomous Systems Governance and Regulation
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Apart Research
for Fazl Barez

Schedule

- 09:00 - 09:15 Opening Remarks
- 09:15 - 09:45 Invited Talk 1 - Ian McKenzie
- 09:45 - 10:30 Oral presentations
- 10:30 - 14:00 Break
- 14:00 - 14:30 Invited talk 2 - Najoung Kim
- 14:30 - 15:15 Panel discussion
- 15:15 - 15:30 Best paper announcement and closing remarks
- 15:30 - 17:30 Poster session

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Underline

Best paper award

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InstructEval: Towards Holistic Evaluation of Instruction-Tuned Large Language Models

Yew Ken Chia, Pengfei Hong, Lidong Bing, Soujanya Poria

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"... our evaluation involves a rigorous assessment of models based on problem-solving, writing ability, and alignment to human values. We take a holistic approach to analyze various factors affecting model performance, including the pretraining foundation, instruction-tuning data, and training methods. Our findings reveal that the quality of instruction data is a crucial factor in scaling model performance. "

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Thank you!

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Poster session

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