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MAGAZINE

# Andrea Micheli wins ERC Starting grant for frontier research in AI

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## The news of the grant from the European Research Council (ERC), Europe's leading body that subsidizes excellent frontier research, came following a highly competitive selection

*"I felt a strong sense of surprise,"* **Micheli** said, *"when I learned that I had won: these grants are extremely selective and reaching this milestone was not a foregone conclusion. It is a great satisfaction, both for me and for FBK, which rewards and promotes many years of hardwork."*

Head of the **PSO (Planning, Scheduling and Optimization) Research Unit** at FBK's **Digital Industry Center** , **Andrea Micheli** was the winner in the **"Starting grant"** category, reserved for talented scholars in the early stages of their careers.He will be able to count on a grant of about 1.5 million euros (exactly 1,493,750) to develop together with a team of researchers and doctoral students the **STEP-RL project** over five years, from January 1, 2024 to December 31, 2028.

Micheli outperformed the competition and convinced the jury by presenting his project in the area of **Temporal Planning**, one of the most strategic fields of **Artificial Intelligence**, with applications in **autonomous robotics**, **logistics**, **flexible manufacturing** and many other areas.

*"Planning,"* Andrea Micheli explained, *"is the ability to create a strategy to achieve a desired goal and is one of the fundamental forms of intelligence. Temporal Planning studies the automated synthesis of strategies when* ***time constraints are important*** *.With my project we will study the basics of a new approach to temporal planning that is both domain-independent and efficient at the same time. The idea is to adopt techniques by which computer systems can continuously improve, becoming more efficient through self-adaptation. We want our algorithms to improve as new*

*problems emerge, a bit like an apprentice learning from his or her own experience."*

Satisfaction was also expressed by FBK's top management, in particular by **President Ferruccio Resta** who commented, "The acquisition of this ERC project attests to the quality and European positioning of FBK, which can ths become one of the centers of international relevance on artificial intelligence, on its opportunities and the impact it will have on society. It also acknowledges Andrea Micheli's commitment and talent, in line with FBK's mission to combine scientific excellence with the ability to achieve high-level results."

Finally, FBK Digital Industry Center Director **Alessandro Cimatt**i also added to the congratulations for the achievement: "Automated planning is one of the pillars of the Center, and recent activities have led us to be recognized as being at the forefront on these issues, thanks to the fact that we can provide advanced solutions to important problems such as manufacturing process optimization, train routing or energy production."

Link to the official ERC results announcement: https://erc.europa.eu/news-events/news/erc-2023-starting-grants-results

**PERMALINK**

https://magazine.fbk.eu/en/news/andrea-micheli-wins-erc-starting-grant-for-frontier-research-in-ai/

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