Teach AI to High Schoolers!

Teaching material

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Teaching AI to high schoolers?

Can you teach AI in just 3 lectures?

YES WE CAN!

Pedagogical Approach:

Start with Intuition, Build to Mathematics Begin with real-world analogies before introducing technical concepts. Use pattern recognition examples students understand (recognizing faces, predicting weather) to explain ML fundamentals. Introduce neural networks as "digital brains" that learn from examples, then gradually add mathematical formulations.

Key Benefits for high school Students

Foundation for Modern Engineering

ML is increasingly integrated across all engineering disciplines - from optimizing manufacturing processes to designing smart infrastructure. Early exposure prepares students for interdisciplinary collaboration and emerging career paths.

Problem-Solving Mindset

Teaching ML concepts develops systems thinking, data-driven decision making, and iterative refinement approaches that benefit any engineering domain. Students learn to break complex problems into manageable components.

Conclusion

WE are awesome and we will!

Eugenio Culurciello, August 2025