NeurIPS 2025 Educational Content for the AI Education Resource Showcase

The Beginner's Mind Guide to Machine Learning

Target Audience

This guide is designed for non-expert learners including:

- High school and early undergraduate students
- Educators introducing AI/ML concepts
- Curious professionals and general audiences without a technical background

Estimated Viewing/Reading Time

Approximately 12–15 minutes

Format of Submission

Interactive visual slide presentation and pdf, designed to be printable or browsed digitally. Includes:

- Rich illustrations and analogies
- Step-by-step breakdown of ML concepts
- Toy-themed metaphors to simplify learning
- No prior coding or math background required

Brief Description of the Educational Material

The Beginner's Mind Guide to Machine Learning introduces core ML concepts through clear visuals, intuitive examples, and storytelling. Framed around a "learning with toys" analogy, the guide demystifies machine learning for non-experts without sacrificing accuracy. It covers the four major types of ML, and all foundational algorithms under supervised and unsupervised ML, all while using simple language and memorable illustrations.

Why This Resource Matters

Machine Learning is often the gateway into the broader world of AI, but it's usually taught with technical jargon or mathematical complexity. This guide bridges that gap by making ML accessible, visual, and engaging for beginners of all ages.

Submitted by:

Nikhil Singh (<u>nikhilsg@amazon.com</u>) Mitali Saini (<u>msaini32@gatech.edu</u>)