Cover Letter

Dear NeurIPS Committee,

We wish to submit an educational material entitled "From Basics to Artificial Intelligence: Designing Significant Early-Stage AI Courses" for consideration by NeurIPS2025 AI Education Resource Showcase. We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere.

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We believe that this submission is appropriate for inclusion in the NeurIPS AI Education Resource Showcase because it directly aligns with the program's mission to make AI concepts accessible to learners without a technical background, while maintaining accuracy, balance, and ethical awareness. The resource minimizes technical jargon, uses intuitive analogies, and integrates visual aids to support comprehension. It also reflects the Aims & Scope by presenting AI's capabilities alongside its limitations, fostering responsible and informed perspectives.

This educational material targets non-expert audiences, including high school students, undergraduates from non-computer science majors, educators, professionals in other domains, and the general public. It offers a concise yet comprehensive introduction to artificial intelligence, beginning with the societal and technological drivers for its development — such as massive data generation, increasing system complexity, and personalized demands — before outlining its historical evolution from symbolic reasoning to deep learning and large language models. Core concepts are explained through clear comparisons between AI and human cognition, highlighting differences in learning mechanisms, scalability, and adaptability. The material also surveys diverse applications, including natural language processing, image generation, audio processing, video creation, and data analytics, while introducing the "three pillars" of data, algorithms, and computational power that underpin AI content generation. Ethical and practical limitations, such as bias, privacy, creativity constraints, and automation's societal impact, are discussed to provide a balanced perspective. By combining accuracy, visual clarity, and relatable examples, it equips learners with foundational knowledge to critically engage with the evolving AI landscape.

We have no conflicts of interest to disclose.

Please address all correspondence concerning this manuscript to me at hoihang@hku.hk.

Thank you for your consideration of this manuscript.

Sincerely.