## **Preface**

This book introduces a collection of selected papers from the 2024 OkIP Academia & Industry Convention conferences held Online and in Oklahoma City, Oklahoma, USA, on April 1-4 and October 1-3, 2024. One of the missions of the Academia & Industry Convention series is to promote quality research and development in a diverse and inclusive environment.

These events had authors and participants from around the world with diverse origins, experiences, and backgrounds. The International Technical Program Committees thank those who submitted papers for consideration. Two to three experts in the field peer-reviewed each submitted paper for originality, relevance, contribution, structure, clarity, appropriateness, discussion, and conclusion.

The overall manuscript acceptance rate for full papers was 28%; 42% of the remaining proposals were accepted as short, poster, or abstract papers.

We are grateful to our many colleagues who offered their services to make the event successful and help prepare this document. We want to thank the Distinguished Keynote Speakers from academia and the industry whose reputation and name recognition were big selling points in preevent marketing. Notably, Prof. Ram D. Sriram of the National Institute of Standards and Technology, USA, and Prof. Juyang Weng of the Brain-Mind Institute and Genisama LLC, Michigan, USA

We would also like to thank the General and Technical Program Committee members who helped organize this event; their names appear on the subsequent pages. We express our gratitude to all the authors of this book and the speakers who shared their research results.

We are also grateful to all the staff of Oklahoma International Publishing for the excellent professional service they provided for this book project and the overall event organization.

The document is composed of three parts, each dealing with competitive tools, techniques, and applications respectively in (1) Healthcare and Society, (2) Energy and Computing, and (3) Artificial Intelligence and Smart Systems.