



## **AI Engineering: Software Engineering for Artificial Intelligence— Development of Complex Machine Learning Systems**

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### **Message from the Guest Editor**

In the development and implementation of advanced and complex AI applications, particularly in machine learning (ML) applications, the main challenge is not to develop the best models/algorithms but to provide support for the entire application lifecycle—from a business idea, through the collection and management of data, building AI algorithms, software development managing both data and code, product deployment and operation, and to its evolution. Software engineering has, since its initiation more than 50 years ago, provided many means of developing complex software systems. Some of these means can be utilized in the development of AI applications, but there are many new elements that require novel approaches to implement full support of software engineering for AI.

The main objective of this Special Issue is to identify challenges and needs, discuss experiences in the development of complex AI applications and AI-enabled systems, and consider the new approaches, theories, methods, and tools in software engineering that support this development.

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## Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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