# **Artificial Intelligence Resources**

<u>Artificial Intelligence at Mass General Brigham</u>: This site is intended to provide updates on how Mass General Brigham is applying artificial intelligence (AI) to address strategic priorities and improve care team, employee, patient and employee experiences.

## Offerings through HMS, Harvard University, and other institutions

#### Artificial Intelligence in Medicine course

#### Offered by the Schepens Eye Research Institute

This course serves as an introduction to artificial intelligence (AI) with an emphasis on its applications in medicine. The course will start from classical linear and non-linear regression models, and then move to classical machine learning models including matrix decomposition methods, random forest, support vector machine, and traditional neural network based on multilayer perceptron and finally dive into the latest deep neural networks such as convolutional neural networks and transformers.

# AI for Health Care: Concepts and Applications

# Offered by the Harvard T.H. Chan School of Public Health

Under the tutelage of distinguished Harvard faculty, AI for Health Care: Concepts and Applications offers a conduit to transition from traditional health care paradigms to a more data-driven and AI-augmented approach. Adopting a "zero-to-AI" strategy, this course is crafted to equip health care professionals with foundational concepts, fine-tuned for health care applications. The curriculum navigates real-world health care dynamics, exploring AI's potential to transform the doctor-patient relationship, and establishing a foundation for ethical AI deployment within healthcare.

#### Al in Health Care: From Strategies to Implementation

#### Offered by Harvard Medical School

This program explores the opportunities and complexities of applying AI in the unique cultural, economic, and business contexts of health care. The potential of AI to revolutionize health care and the life sciences industry is immense, but given the high stakes, the challenges and risks must be considered and handled responsibly. During the program, you will discover what it takes to harness AI for medical purposes, including all of the important steps in the AI development pipeline. Whether you're an AI developer, a health care professional or a leader in the life sciences or digital health, this program will prepare you to make smart decisions in bringing the innovation of AI to the health care sector.

#### AI in Health Care (online short course)

#### Offered by the MIT Sloan School of Management

In this 6 week course participants will develop an understanding of how AI is transforming health care and explore case studies that reveal how these technologies are being deployed to overcome challenges and optimize processes.

## Al Cures Conference

# Offered jointly by MIT and Mass General Brigham

Building on the combined expertise of MIT and MGB in AI and clinical practice, the MIT-MGB AI Cures Conference showcases ongoing collaborative projects in clinical AI, highlighting cutting-edge research and their impact on patient care.