# Một số khóa học về khoa học máy tính và lập trình MIỄN PHÍ

Các khóa học Computer Science/ Programming MIỄN PHÍ

#### **Material Sources:**

- Offline: Sách từ Thư viện trường, thư viện công cộng, Nhà sách
- Online: Web via Google search, Youtube via Google/Youtube search, MOOC, School web, Sách điện tử (pdf, epub)

#### **Learning Tools:**

- Computer/Laptop/iPad, Mobile
- Translate (Build-in Translate in Browser, Google Translate extension, Language Reactor)
- Notes (Notion, Apple Notes, OneNote)
- Read later (Pocket, Instapaper)

#### Free Courses:

#### **Harvard**

1/ CS50 from Harvard cs50.harvard.edu/x/2023

2/ Programming with Python from Harvard cs50.harvard.edu/python/2022

3/ Data Science with Python from Harvard pll.harvard.edu/course/introduction-data-science-python/2023-10

4/ AI with Python from Harvard pll.harvard.edu/course/cs50s-introduction-artificial-intelligence-python/2023-05

5/ Full Stack Web from Harvard pll.harvard.edu/course/cs50s-web-programming-python-and-javascript/2023-05

Các khóa học khác của Harvard: https://pll.harvard.edu/catalog (Các khóa học trên edx về Data Science của Harvard:

https://www.edx.org/search?subject=Computer+Science&partner=Harvard+University)

#### (Các khóa hoc trên edx về Data Science:

https://www.edx.org/search?subject=Computer%20Science)

#### **Stanford**

#### 6/SQL from Stanford

online.stanford.edu/courses/soe-ydatabases0005-databases-relational-databases-and-sql

#### 7/ Advanced SQL from Stanford

online.stanford.edu/courses/soe-ydatabases0001-databases-advanced-topics-sql

#### 8/ Compiler Design from Stanford

online.stanford.edu/courses/soe-ycscs1-compilers

#### (Các khóa hoc Free khác của Stanford:

https://online.stanford.edu/explore) (Các khóa hoc trên edx của Stanford:

https://www.edx.org/search?subject=Computer+Science&partner=Stanford+University)

#### **Google**

## 9/ New to Computer Science from Google

techdevguide.withgoogle.com/paths/new\_to\_cs

## 10/ Data Structures & Algorithms (DSA) from Google

tech devguide. with google. com/paths/data-structures- and-algorithms

#### (Các khóa hoc khác của TechDevGuide:

https://techdevguide.withgoogle.com)

## 11/ Machine Learning from Google

developers.google.com/machine-learning/crash-course

## 12/ Advanced Machine Learning from Google

developers.google.com/machine-learning/advanced-courses

#### (Các khóa học Machine Learning khác của Google:

https://developers.google.com/machine-learning/foundational-courses https://developers.google.com/machine-learning/advanced-courses)

#### **Microsoft**

#### 13/ Java from Microsoft

learn.microsoft.com/en-us/shows/java-for-beginners

#### 14/ JavaScript from Microsoft

learn.microsoft.com/en-us/shows/beginners-series-to-javascript learn.microsoft.com/en-us/training/paths/web-development-101 learn.microsoft.com/en-us/training/paths/build-javascript-applications-typescript

#### 15/ C# 101 from Microsoft

learn.microsoft.com/en-us/shows/csharp-101

#### 16/C# from Microsoft

learn.microsoft.com/en-us/shows/csharp-fundamentals-for-absolute-beginners

#### (Các khóa học khác của Microsoft:

https://learn.microsoft.com/en-us/shows)

(Các training khác của Microsoft:

https://learn.microsoft.com/en-us/training/browse)

#### **freeCodeCamp**

# 17/ C# from Microsoft via freeCodeCamp freecodecamp.org/learn/foundational-c-sharp-with-microsoft

(Các khóa học về Web, Database, Machine Learning khác của freeCodeCamp: https://www.freecodecamp.org/learn)

## 18/ HTML, CSS from freeCodeCamp

freecodecamp.org/learn/2022/responsive-web-design

## 19/ SQL from freeCodeCamp

freecodecamp.org/learn/relational-database

## 20/ NodeJS Back-end & APIs from freeCodeCamp

freecodecamp.org/learn/back-end-development-and-apis

## 21/ Python from freeCodeCamp

freecodecamp.org/learn/scientific-computing-with-python

## 22/ Data Analysis with Python

freecodecamp.org/learn/data-analysis-with-python

#### 23/ Machine Learning with Python

freecodecamp.org/learn/machine-learning-with-python

#### **MIT**

#### 24/ Mathematics (incl. Statistics) from MIT

ocw.mit.edu/search/?d=Mathematics&s=department\_course\_numbers.sort\_coursen um

## 25/ Deep Learning from MIT

introtodeeplearning.com

## 26/ OS, Networking from MIT

ocw.mit.edu/courses/6-033-computer-system-engineering-spring-2018

#### **Hongkong University of Science and Technology**

## 27/ Java from HKUST

Part 1: edx.org/learn/java/the-hong-kong-university-of-science-and-technology-introduction-to-java-programming-part-1

Part 2: edx.org/learn/java/the-hong-kong-university-of-science-and-technology-introduction-to-java-programming-part-2

## Các khóa học khác trên edx của HKUST:

https://www.edx.org/school/hkustx

## **CognitiveClass**

28/ Data Science from Cognitive Class cognitive class.ai/courses/data-science-101

(Các khóa học AI, Data Science, Machine Learning,... khác của CognitiveClass: https://cognitiveclass.ai/courses)