

CS50 Certificate

CS50 congratulates

Chng Soon Siang

on completion of CS50's Introduction to
Artificial Intelligence with Python,
including twelve projects and seven quizzes.

Awarded from Cambridge, Massachusetts,
in the year two thousand twenty-one.



David J. Malan

Gordon McKay Professor of the Practice of Computer Science
Harvard University



<https://cs50.harvard.edu/certificates/5ae95ec2-03fb-4e8f-8aef-f7e7277d2b46>





3 Courses

Getting started with
TensorFlow 2

Customising your models
with TensorFlow 2

Probabilistic Deep Learning
with TensorFlow 2

Imperial College
London

May 25, 2021

Soon Siang Chng

has successfully completed the online, non-credit Specialization

TensorFlow 2 for Deep Learning

In this Specialization, learners have acquired and honed practical skills in the popular deep learning framework TensorFlow to develop deep learning models for a range of applications such as image classification, language translation and text and image generation. Learners completed programming assignments and capstone projects to apply their knowledge and skills.

Dr Kevin Webster
Senior Teaching Fellow
in Statistics

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.

Verify this certificate at:
coursera.org/verify/specialization/4837QTXR5MZH



Jun 23, 2021

Soon Siang Chng

has successfully completed

Introduction to Machine Learning in Production

an online non-credit course authorized by DeepLearning.AI and offered through Coursera

A blue ink signature of Andrew Ng.

Andrew Ng
Founder, DeepLearning.AI
Co-founder, Coursera

COURSE
CERTIFICATE



Verify at coursera.org/verify/P89P6D32AMPB

Coursera has confirmed the identity of this individual and their participation in the course.



Jun 25, 2021

Soon Siang Chng

has successfully completed

Machine Learning Data Lifecycle in Production

an online non-credit course authorized by DeepLearning.AI and offered through Coursera

A handwritten signature in black ink, appearing to read 'Robert Crowe', written over a dotted line.

Robert Crowe
TensorFlow Developer Engineer, Google

COURSE
CERTIFICATE



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Coursera has confirmed the identity of this individual and their participation in the course.



Jul 1, 2021

Soon Siang Chng

has successfully completed

**Machine Learning Modeling Pipelines in
Production**

an online non-credit course authorized by DeepLearning.AI and offered through Coursera

A handwritten signature in black ink, appearing to read 'Robert Crowe'.

Robert Crowe
TensorFlow Developer Engineer, Google

**COURSE
CERTIFICATE**



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Coursera has confirmed the identity of this individual and their
participation in the course.



4 Courses

Browser-based Models with TensorFlow.js

Device-based Models with TensorFlow Lite

Data Pipelines with TensorFlow Data Services

Advanced Deployment Scenarios with TensorFlow



Nov 8, 2020

Soon Siang Chng

has successfully completed the online, non-credit Specialization

TensorFlow: Data and Deployment

In this specialization, you continued to develop your understanding of machine learning with TensorFlow: Data and Deployment. You have gone beyond basic modeling and learned how to train and run your models within a browser, optimize machine learning models for mobile devices, and create effective data pipelines with TensorFlow Data Services. Now that you've learned the various ways to deploy your models, you're well-prepared to take your models into the hands of real people on all kinds of devices!

Laurence Moroney
Staff AI Advocate
Google Brain

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4 Courses

**Introduction to TensorFlow
for Artificial Intelligence,
Machine Learning, and Deep
Learning**

**Convolutional Neural
Networks in TensorFlow**

**Natural Language
Processing in TensorFlow**

**Sequences, Time Series and
Prediction**



Aug 2, 2020

Soon Siang Chng

has successfully completed the online, non-credit Professional
Certificate

DeepLearning.AI TensorFlow Developer

Congratulations! You have completed all 4 courses of the DeepLearning.AI TensorFlow Developer Professional Certificate program. As part of this Professional Certificate program, you have learned: how to build and train neural networks using TensorFlow, how to improve network performance using convolutions as you train it to identify real-world images, how to teach machines to understand, analyze, and respond to human speech with natural language processing systems, and more! These, and other TensorFlow concepts, are going to be at the forefront of the coming transformation to an AI-powered future.

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Laurence Moroney
Lead AI Advocate
Google

Andrew Ng
Founder
DeepLearning.AI

Verify this certificate at:
[coursera.org/verify/professional-
cert/Y9MTRK57HEBN](https://coursera.org/verify/professional-cert/Y9MTRK57HEBN)



5 Courses

Neural Networks and Deep Learning

Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization

Structuring Machine Learning Projects

Convolutional Neural Networks

Sequence Models



07/14/2020

Soon Siang Chng

has successfully completed the online, non-credit Specialization

Deep Learning

The Deep Learning Specialization is designed to prepare learners to participate in the development of cutting-edge AI technology, and to understand the capability, the challenges, and the consequences of the rise of deep learning. Through five interconnected courses, learners develop a profound knowledge of the hottest AI algorithms, mastering deep learning from its foundations (neural networks) to its industry applications (Computer Vision, Natural Language Processing, Speech Recognition, etc.).

Adjunct Professor
Andrew Ng
Computer Science

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5 Courses

Programming for Everybody
(Getting Started with Python)

Python Data Structures

Using Python to Access Web
Data

Using Databases with Python

Capstone: Retrieving,
Processing, and Visualizing Data
with Python



04/09/2020

Soon Siang Chng

has successfully completed the online, non-credit Specialization

Python for Everybody

This Specialization builds on the success of the Python for Everybody course and will introduce fundamental programming concepts including data structures, networked application program interfaces, and databases, using the Python programming language. In the Capstone Project, you'll use the technologies learned throughout the Specialization to design and create your own applications for data retrieval, processing, and visualization.

Charles Severance
Clinical Associate
Professor, School of
Information
University of Michigan

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