COURSE CERTIFICATE

UNIVERSITY OF MICHIGAN

07/01/2020

Alaa Diab

has successfully completed

Capstone: Retrieving, Processing, and Visualizing Data with Python

an online non-credit course authorized by University of Michigan and offered through Coursera

Charles Severance
Clinical Professor, School of Information
University of Michigan

EDUCATION FOR EVERYONE · COURSE CERTIFICATE

coursera

COURSE CERTIFICATE

06/16/2020

Alaa Diab

has successfully completed

Create Your First Python Program

an online non-credit course authorized by Coursera Project Network and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Amit Yadav
Instructor
Machine Learning and Data Science

Verify at coursera.org/verify/KMF77V55FAG4

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

UNIVERSITY OF MICHIGAN

COURSE CERTIFICATE

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

02/28/2020

Alaa Diab

has successfully completed

Python Data Structures

an online non-credit course authorized by University of Michigan and offered through Coursera

Charles Severance
Clinical Professor, School of Information
University of Michigan

coursera

LEARNING WITHOUT LIMITS · SPECIALIZATION CERTIFICATE

5 Courses

M

UNIVERSITY OF MICHIGAN

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

07/06/2020

Alaa Diab

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

Verify this certificate at:
coursera.org/verify/specialization/YYN8JMXTM9TA

UNIVERSITY OF MICHIGAN

COURSE CERTIFICATE

07/06/2020

Alaa Diab

has successfully completed

Using Databases with Python

an online non-credit course authorized by University of Michigan and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Charles Severance
Clinical Professor, School of Information
University of Michigan
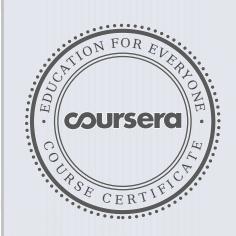
COURSE CERTIFICATE

02/17/2020

Alaa Diab

has successfully completed

Programming for Everybody (Getting Started with Python)

an online non-credit course authorized by University of Michigan and offered through Coursera

coursera

EDUCATION FOR EVERYONE · COURSE CERTIFICATE ·

Charles Severance
Clinical Professor, School of Information
University of Michigan

Jovian.ml

CERTIFICATE OF ACCOMPLISHMENT

This is awarded to

Alaa Diab

Issued October 14th, 2020

For successfully completing

Data Analysis with Python: Zero to Pandas

an online course offered by Jovian.ml, representing approximately 60 hours of coursework

AAKASH N S
COURSE INSTRUCTOR
FOUNDER OF JOVIAN.ML

BEAU CARNES
TEACHER AT
FREECODECAMP.ORG

*Authenticity of this certificate can be verified at https://jovian.ml/verify/MFQTCMRSGQ

Jovian

CERTIFICATE OF ACCOMPLISHMENT

Issued May 17th, 2021

This is awarded to

Alaa Diab

For successfully completing

Data Structures and Algorithms in Python

an online course offered by Jovian, representing approximately 60 hours of coursework

AAKASH N S
COURSE INSTRUCTOR
FOUNDER, JOVIAN
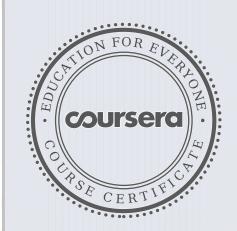
UNIVERSITY OF MICHIGAN

04/18/2020

Alaa Diab

has successfully completed

Using Python to Access Web Data

an online non-credit course authorized by University of Michigan and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Charles Severance
Clinical Professor, School of Information
University of Michigan

Verify at coursera.org/verify/S3U4B469W4ZH

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

COURSE CERTIFICATE

08/10/2020

Alaa Diab

has successfully completed

Introduction to HTML5

an online non-credit course authorized by University of Michigan and offered through Coursera

EDUCATION FOR EVERYONE

coursera

COURSE CERTIFICATE

Colleen van Lent

Colleen van Lent, Ph.D.
Lecturer
School of Information, University of Michigan

Charles Severance
Clinical Professor, School of Information
University of Michigan

Verify at coursera.org/verify/FAHV3QS69WK5

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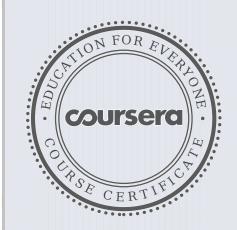
UNIVERSITY OF MICHIGAN

03.10.2020

Alaa Diab

has successfully completed

Introduction to CSS3

an online non-credit course authorized by University of Michigan and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Colleen van Lent

Colleen van Lent, Ph.D.
Lecturer
School of Information, University of Michigan

Charles Severance
Clinical Professor, School of Information
University of Michigan

**COURSE
CERTIFICATE**

Oct 23, 2020

Alaa Diab

has successfully completed

Interactivity with JavaScript

an online non-credit course authorized by University of Michigan and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Colleen van Lent, Ph.D.
Lecturer
School of Information, University of Michigan

Charles Severance
Clinical Professor, School of Information
University of Michigan

Verify at coursera.org/verify/J9YVXTN96S3X

VANDERBILT UNIVERSITY

COURSE CERTIFICATE

Mar 20, 2021

Alaa Diab

has successfully completed

Introduction to Programming with MATLAB

an online non-credit course authorized by Vanderbilt University and offered through Coursera

EDUCATION FOR EVERYONE · COURSE CERTIFICATE · coursera

Akos Ledeczi, Ph.D.
Professor
Computer Engineering, Computer Science, and Electrical Engineering

J. Michael Fitzpatrick, PhD
Professor Emeritus
Computer Science, Computer Engineering, Electrical Engineering, Neurosurgery, and Radiology

Verify at:

technische universität
dortmund

Fakultät für Elektrotechnik und
Informationstechnik

ie³

Institut für Energiesysteme, Energieeffizienz
und Energiewirtschaft

Prof. Dr.-Ing. Timm Faulwasser
Emil-Figge-Straße 70
44227 Dortmund
Tel 0231/755- 2359
Fax 0231/755-2694
Timm.Faulwasser@tu-dortmund.de
www.ie3.tu-dortmund.de

Technische Universität Dortmund | D-44221 Dortmund

Mr. Alaa Diab

Diktatzeichen	Aktenzeichen	Ort	Datum	Dienstgebäude/Raum
		Dortmund	16.11.2021	BCI-G2-4.23

Certificate of Successful Participation in the Course „Practical Distributed Optimization in Julia"

To whom it may concern,

hereby we confirm that Mr. Alaa Diab passed the oral examination to the course „Practical Distributed Optimization in Julia" at TU Dortmund University successfully with a grade of 4.0. The grade scale at German University spans 1.0 (very good) to 4.0 (passed) and 5.0 (failed). The examination took place at October 14th 2021 and the course involves a workload of 5 ECTS credits.

Sincerely,

Prof. Dr.-Ing. Timm Faulwasser

Stanford | ONLINE
STATEMENT OF ACCOMPLISHMENT

January 24, 2020

Alaa Diab

has successfully completed a free online offering of

Computer Science 101

Nick Parlante
Lecturer, Computer Science
Stanford University

PLEASE NOTE: SOME ONLINE COURSES MAY DRAW ON MATERIAL FROM COURSES TAUGHT ON-CAMPUS BUT THEY ARE NOT EQUIVALENT TO ON-CAMPUS COURSES. THIS STATEMENT DOES NOT AFFIRM THAT THIS PARTICIPANT WAS ENROLLED AS A STUDENT AT STANFORD UNIVERSITY IN ANY WAY. IT DOES NOT CONFER A STANFORD UNIVERSITY GRADE, COURSE CREDIT OR DEGREE, AND IT DOES NOT VERIFY THE IDENTITY OF THE PARTICIPANT.

Authenticity can be verified at **https://verify.lagunita.stanford.edu/SOA/27f7e032bbe34b8097e779f6beff75e1**

VERIFIED
CERTIFICATE *of* ACHIEVEMENT

uc3m | Universidad **Carlos III** de Madrid

Carlos Delgado Kloos
Vice-President for Strategy and Digital Education
Universidad Carlos III de Madrid

This is to certify that

Alaa Diab

successfully completed and received a passing grade in

IT.1.1x: Introduction to Java Programming: Starting to code in Java

a course of study offered by UC3Mx, an online learning initiative of Universidad Carlos III de Madrid.

edX **VERIFIED CERTIFICATE**
Issued December 13, 2019

VALID CERTIFICATE ID
10a03a3b56c94f29939d34a41eee320e