



NANODEGREE PROGRAM



Robotics Software Engineer

CERTIFICATE OF COMPLETION

Awarded to

Ibad Rather

A stylized, handwritten signature in black ink, reading 'Sebastian Thrun'.

SEBASTIAN THRUN

Founder, Udacity

June 28, 2021

Udacity has confirmed the participation of this individual in this program. Confirm program completion at confirm.udacity.com/PPG5APCA



Apr 14, 2019

Ibad Rather

has successfully completed

Programming for Everybody (Getting Started with Python)

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

A handwritten signature in black ink, appearing to read 'Charles', followed by a horizontal line.

Charles Severance
Clinical Professor, School of Information
University of Michigan

COURSE
CERTIFICATE



Verify at:
<https://coursera.org/verify/2KEKZJU93W4Y>

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



Mar 2, 2023

Ibad Rather

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'.

Robert Crowe
TensorFlow Developer Engineer, Google

COURSE
CERTIFICATE



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<https://coursera.org/verify/4QYMUA4RYJQT>

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



Apr 18, 2019

Ibad Rather

has successfully completed

Python Data Structures

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

A handwritten signature in black ink, appearing to read 'Charles', followed by a horizontal line.

Charles Severance
Clinical Professor, School of Information
University of Michigan

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



Jan 22, 2020

Ibad Rather

has successfully completed

Tools for Data Science

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

A handwritten signature in black ink, appearing to read "Svetlana Levitan".

Maureen McElaney
Romeo Kienzler
Svetlana Levitan

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CERTIFICATE**



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



Mar 16, 2021

Ibad Rather

has successfully completed

Crash Course on Python

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

Google

Google

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



Georgia Institute of Technology

Apr 5, 2019

Ibad Rather

has successfully completed

Machine Design Part I

an online non-credit course authorized by Georgia Institute of Technology and offered through Coursera

Dr. Kathryn Wingate
Academic Professional
Woodruff School of Mechanical Engineering

COURSE
CERTIFICATE



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<https://coursera.org/verify/7F5EDRXWN2N>

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



Oct 21, 2019

Ibad Rather

has successfully completed

Machine Learning with Python

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

Saeed Aghabozorgi
Sr. Data Scientist
IBM

Joseph Santarcangelo
Senior Data Scientist
IBM

**COURSE
CERTIFICATE**



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<https://coursera.org/verify/8TSW2YPUQV8X>

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



Feb 6, 2021

Ibad Rather

has successfully completed

The Arduino Platform and C Programming

an online non-credit course authorized by University of California, Irvine and offered through Coursera

A handwritten signature in black ink, appearing to read "Ian Harris", written over a horizontal dotted line.

Ian Harris
Professor
Department of Computer Science

COURSE
CERTIFICATE



Verify at:
<https://coursera.org/verify/8ZX943MAX4MT>

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



Oct 11, 2019

Ibad Rather

has successfully completed

Building AI Applications with Watson APIs

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

Antonio Cangiano
Software Developer and Technical Evangelist
IBM Digital Business Group

Tanmay Bakshi
AI Evangelist & Watson Developer

COURSE CERTIFICATE



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<https://coursera.org/verify/9PHZPTMTJK9N>

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



Oct 5, 2019

Ibad Rather

has successfully completed

Getting Started with AI using IBM Watson

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

A handwritten signature in black ink, appearing to read "Rav Ahuja".

Rav Ahuja
Global Program Director,
Skills Network

**COURSE
CERTIFICATE**



Verify at:

<https://coursera.org/verify/27VF2ED8CP5X>

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



May 6, 2019

Ibad Rather

has successfully completed

Data Visualization with Python

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

A handwritten signature in black ink, appearing to read "Saishruthi".

Saishruthi Swaminathan
Data Scientist
IBM CODAIT

**COURSE
CERTIFICATE**



Verify at:

<https://coursera.org/verify/28BY9UYBSQGC>

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



Oct 4, 2019

Ibad Rather

has successfully completed

Introduction to Artificial Intelligence (AI)

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

A handwritten signature in black ink, appearing to read "Rav Ahuja".

Rav Ahuja
Global Program Director,
Skills Network

**COURSE
CERTIFICATE**



Verify at:

<https://coursera.org/verify/84H4VJUT93VV>

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



Mar 1, 2023

Ibad Rather

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:
<https://coursera.org/verify/CSB2CTXDA93X>

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



Feb 6, 2021

Ibad Rather

has successfully completed

Interfacing with the Arduino

an online non-credit course authorized by University of California, Irvine and offered through Coursera

A handwritten signature in black ink, which appears to read "Ian Harris", is positioned above a horizontal dotted line.

Ian Harris
Professor
Department of Computer Science

COURSE
CERTIFICATE



Verify at:
<https://coursera.org/verify/DWXNDWY24AL5>

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



Oct 11, 2019

Ibad Rather

has successfully completed

Introduction to Computer Vision and Image Processing

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

A handwritten signature in black ink, reading "Joseph Santarcangelo".

Aije Egwaikhide
Senior Data Scientist
IBM

Joseph Santarcangelo
Senior Data Scientist
IBM

**COURSE
CERTIFICATE**



Verify at:

<https://coursera.org/verify/FBT5PE6QKTLT>

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



Apr 8, 2021

Ibad Rather

has successfully completed

Convolutional Neural Networks in TensorFlow

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

A stylized, handwritten signature of Laurence Moroney in blue ink.

Laurence Moroney
Lead AI Advocate, Google

COURSE
CERTIFICATE



Verify at:
<https://coursera.org/verify/JDRHSR3TZCSJ>

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



Feb 8, 2021

Ibad Rather

has successfully completed

**Introduction to the Internet of Things and
Embedded Systems**

an online non-credit course authorized by University of California, Irvine and offered
through Coursera

A handwritten signature in black ink, which appears to read "Ian Harris", is positioned above a horizontal dotted line.

Ian Harris
Professor
Department of Computer Science

**COURSE
CERTIFICATE**



Verify at:
<https://coursera.org/verify/KLZRW2N6K9BE>

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



Oct 6, 2019

Ibad Rather

has successfully completed

Building AI Powered Chatbots Without Programming

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

A handwritten signature in black ink that reads "Antonio Cangiano".

Antonio Cangiano
Software Developer and Technical Evangelist
IBM Digital Business Group

COURSE CERTIFICATE



Verify at:
<https://coursera.org/verify/KP2TVWR26TYJ>

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



Feb 11, 2021

Ibad Rather

has successfully completed

Interfacing with the Raspberry Pi

an online non-credit course authorized by University of California, Irvine and offered through Coursera

A handwritten signature in black ink, which appears to read "Ian Harris", is positioned above a horizontal dotted line.

Ian Harris
Professor
Department of Computer Science

COURSE
CERTIFICATE



Verify at:
<https://coursera.org/verify/MFU9PEP3NZ8B>

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



May 4, 2019

Ibad Rather

has successfully completed

Data Analysis with Python

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

A handwritten signature in black ink, reading "J. Santarcangelo".

Joseph Santarcangelo
Senior Data Scientist
IBM

**COURSE
CERTIFICATE**



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participation in the course.



Mar 28, 2023

Ibad Rather

has successfully completed

Python Project for Data Engineering

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

Ramesh Sannareddy
Data Engineering Subject Matter Expert
Skill-up Technologies

Joseph Santarcangelo
Senior Data Scientist
IBM

COURSE CERTIFICATE



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



Apr 24, 2019

Ibad Rather

has successfully completed

Python for Data Science, AI & Development

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

A handwritten signature in black ink, reading "Joseph Santarcangelo".

Joseph Santarcangelo
Senior Data Scientist
IBM

**COURSE
CERTIFICATE**



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



Apr 19, 2019

Ibad Rather

has successfully completed

What is Data Science?

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

A handwritten signature in black ink, appearing to read "Rav Ahuja".

Rav Ahuja
Global Program Director,
Skills Network

A handwritten signature in black ink, appearing to read "Alex Akson".

Alex Akson, Ph.D.
Data Scientist

**COURSE
CERTIFICATE**



Verify at:

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