



03/05/2020

Johnathan Oliver Howard
Napier

has successfully completed

Advanced Deployment Scenarios with TensorFlow

an online non-credit course authorized by deeplearning.ai and offered through
Coursera

A handwritten signature in blue ink that reads "Laurence Moroney".

Laurence Moroney
Staff AI Advocate
Google Brain

COURSE
CERTIFICATE



Verify at coursera.org/verify/WP86HRLRV579

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



01/24/2020

Johnathan Oliver Howard
Napier

has successfully completed

Browser-based Models with TensorFlow.js

an online non-credit course authorized by deeplearning.ai and offered through
Coursera

A handwritten signature in blue ink that reads "Laurence Moroney".

Laurence Moroney
Staff AI Advocate
Google Brain

COURSE
CERTIFICATE



Verify at coursera.org/verify/7MBWJG7ZLN7K

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



02/29/2020

Johnathan Oliver Howard
Napier

has successfully completed

Convolutional Neural Networks

an online non-credit course authorized by deeplearning.ai and offered through
Coursera

A handwritten signature in blue ink, reading "Andrew Ng".

Adjunct Professor Andrew Ng
Computer Science

COURSE
CERTIFICATE



Verify at coursera.org/verify/GP9Z3RC9KBUZ

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



01/29/2020

Johnathan Oliver Howard
Napier

has successfully completed

Convolutional Neural Networks in TensorFlow

an online non-credit course authorized by deeplearning.ai and offered through
Coursera

A handwritten signature in blue ink that reads "Laurence Moroney".

Laurence Moroney
Staff AI Advocate
Google Brain

COURSE
CERTIFICATE



Verify at coursera.org/verify/R23ZRDUV53U7

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their participation in the course.



03/05/2020

Johnathan Oliver Howard
Napier

has successfully completed

Data Pipelines with TensorFlow Data Services

an online non-credit course authorized by deeplearning.ai and offered through
Coursera

A handwritten signature in blue ink that reads "Laurence Moroney".

Laurence Moroney
Staff AI Advocate
Google Brain

COURSE
CERTIFICATE



Verify at coursera.org/verify/E695G59TGCH6

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



02/07/2020

Johnathan Oliver Howard
Napier

has successfully completed

Device-based Models with TensorFlow Lite

an online non-credit course authorized by deeplearning.ai and offered through
Coursera

A handwritten signature in blue ink that reads "Laurence Moroney".

Laurence Moroney
Staff AI Advocate
Google Brain

COURSE
CERTIFICATE



Verify at coursera.org/verify/JGDYYYGSFF96

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



02/18/2020

Johnathan Oliver Howard
Napier

has successfully completed

Improving Deep Neural Networks:
Hyperparameter tuning, Regularization and
Optimization

an online non-credit course authorized by deeplearning.ai and offered through
Coursera

A handwritten signature in blue ink, reading "Andrew Ng".

Adjunct Professor Andrew Ng
Computer Science

COURSE
CERTIFICATE



Verify at coursera.org/verify/QVT5UZ4KYZVS

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



01/22/2020

Johnathan Oliver Howard
Napier

has successfully completed

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

an online non-credit course authorized by deeplearning.ai and offered through
Coursera

A handwritten signature in blue ink that reads "Laurence Moroney".

Laurence Moroney
Staff AI Advocate
Google Brain

COURSE
CERTIFICATE



Verify at coursera.org/verify/SHH5QZ5ZPT4A
Coursera has confirmed the identity of this individual and
their participation in the course.



02/05/2020

Johnathan Oliver Howard
Napier

has successfully completed

Natural Language Processing in TensorFlow

an online non-credit course authorized by deeplearning.ai and offered through
Coursera

A handwritten signature in blue ink that reads "Laurence Moroney".

Laurence Moroney
Staff AI Advocate
Google Brain

COURSE
CERTIFICATE



Verify at coursera.org/verify/WW63SFA2HR57

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



02/04/2020

Johnathan Oliver Howard
Napier

has successfully completed

Neural Networks and Deep Learning

an online non-credit course authorized by deeplearning.ai and offered through
Coursera

A handwritten signature in blue ink, reading "Andrew Ng".

Adjunct Professor Andrew Ng
Computer Science

COURSE
CERTIFICATE



Verify at coursera.org/verify/S95V26K2KAZY

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



03/03/2020

Johnathan Oliver Howard
Napier

has successfully completed

Sequence Models

an online non-credit course authorized by deeplearning.ai and offered through
Coursera

A handwritten signature in blue ink, reading "Andrew Ng".

Adjunct Professor Andrew Ng
Computer Science

COURSE
CERTIFICATE



Verify at coursera.org/verify/U6RM9FB6X7TL
Coursera has confirmed the identity of this individual and
their participation in the course.



02/12/2020

Johnathan Oliver Howard
Napier

has successfully completed

Sequences, Time Series and Prediction

an online non-credit course authorized by deeplearning.ai and offered through
Coursera

A handwritten signature in blue ink that reads "Laurence Moroney".

Laurence Moroney
Staff AI Advocate
Google Brain

COURSE
CERTIFICATE



Verify at coursera.org/verify/XSJSR2R6W4QX

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



02/25/2020

Johnathan Oliver Howard
Napier

has successfully completed

Structuring Machine Learning Projects

an online non-credit course authorized by deeplearning.ai and offered through
Coursera

A handwritten signature in blue ink, reading "Andrew Ng".

Adjunct Professor Andrew Ng
Computer Science

COURSE
CERTIFICATE



Verify at coursera.org/verify/ZSU3F3LVDUJX

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



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



03/03/2020

Johnathan Oliver Howard Napier

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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Verify this certificate at:
coursera.org/verify/specialization/AZLA9SKG5JND



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



03/05/2020

Johnathan Oliver Howard Napier

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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Verify this certificate at:
coursera.org/verify/specialization/8ZNXtat8XP3Z



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



02/12/2020

Johnathan Oliver Howard Napier

has successfully completed the online, non-credit Specialization

TensorFlow in Practice

In this specialization, you got a grounding in what you need to get started with TensorFlow: In Practice. The goal was to help you take the next steps, such as going deeper into understanding Machine Learning and the practice of understanding loss functions, optimizers and more, or perhaps you want to know more about neural networks and the different types of layers, from convolutions to recurrent or LSTM. Now that you have used some of them and seen the impact of different layer types in practice, you can go forward equipped to go deeper!

Laurence Moroney is an
AI Advocate at Google
Research

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Verify this certificate at:
coursera.org/verify/specialization/CH5G9WZXB4BS



08/25/2019

Johnathan Oliver Howard
Napier

has successfully completed

Advanced Machine Learning and Signal
Processing

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

A handwritten signature in black ink, appearing to read 'R. Kienzler', written over a horizontal dotted line.

Romeo Kienzler
Chief Data Scientist
IBM Watson IoT

A handwritten signature in black ink, appearing to read 'N. Manchev', written over a horizontal dotted line.

Nikolay Manchev
Data Scientist
IBM EMEA Data Science

COURSE
CERTIFICATE



Verify at coursera.org/verify/Z5RVMUYX3GT3

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



02/14/2020

Johnathan Oliver Howard
Napier

has successfully completed

AI Capstone Project with Deep Learning

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

A handwritten signature in black ink, appearing to read 'Alex Akson', written over a horizontal dotted line.

Alex Akson, Ph.D.
Data Scientist

A handwritten signature in black ink, appearing to read 'Joseph Santarcangelo', written over a horizontal dotted line.

Joseph Santarcangelo
Senior Data Scientist
IBM

COURSE
CERTIFICATE



Verify at coursera.org/verify/3PPTV37TUX26

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



09/13/2019

Johnathan Oliver Howard
Napier

has successfully completed

Applied AI with DeepLearning

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

 *Niketan Pansare* 

Romeo Kienzler, Niketan Pansare, Max Pumperla

COURSE
CERTIFICATE



Verify at coursera.org/verify/GWB422NHL999

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



04/04/2020

Johnathan Oliver Howard
Napier

has successfully completed

Building AI Powered Chatbots Without
Programming

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

Antonio Cangiano

Antonio Cangiano
Software Developer and Technical Evangelist
IBM Digital Business Group

COURSE
CERTIFICATE



Verify at coursera.org/verify/PF678RMD7WB2

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



02/13/2020

Johnathan Oliver Howard
Napier

has successfully completed

Building Deep Learning Models with TensorFlow

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

A handwritten signature in black ink, appearing to read 'Alex Aklson', written over a horizontal line.

Alex Aklson, Ph.D.
Data Scientist

COURSE
CERTIFICATE



Verify at coursera.org/verify/NLYPRVCLZ97C

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



02/06/2020

Johnathan Oliver Howard
Napier

has successfully completed

Deep Neural Networks with PyTorch

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

A handwritten signature in black ink, reading "J. Santarcangelo", written over a horizontal dotted line.

Joseph Santarcangelo
Senior Data Scientist
IBM

COURSE
CERTIFICATE



Verify at coursera.org/verify/MTAWW46VV68D

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



08/17/2019

Johnathan Oliver Howard
Napier

has successfully completed

Fundamentals of Scalable Data Science

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

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

Romeo Kienzler
Chief Data Scientist
IBM Watson IoT

COURSE
CERTIFICATE



Verify at coursera.org/verify/Y3VVABRUESTG
Coursera has confirmed the identity of this individual and
their participation in the course.



04/04/2020

Johnathan Oliver Howard
Napier

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', written over a horizontal dotted line.

Rav Ahuja
AI & Data Science Program Director
IBM Skills Network

COURSE
CERTIFICATE



Verify at coursera.org/verify/VMVRCVMHZMDR

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



04/02/2020

Johnathan Oliver Howard
Napier

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', written over a horizontal dotted line.

Rav Ahuja
AI & Data Science Program Director
IBM Skills Network

COURSE
CERTIFICATE



Verify at coursera.org/verify/M7TQ9LLVDZUJ

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



02/04/2020

Johnathan Oliver Howard
Napier

has successfully completed

Introduction to Deep Learning & Neural Networks
with Keras

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

A handwritten signature in black ink, appearing to read 'Alex Akison', written over a horizontal line.

Alex Akison, Ph.D.
Data Scientist

COURSE
CERTIFICATE



Verify at coursera.org/verify/TJNNM237HYZE

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



01/17/2020

Johnathan Oliver Howard
Napier

has successfully completed

Machine Learning with Python

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

Saeed A.

Saeed Aghabozorgi
Sr. Data Scientist
IBM

COURSE
CERTIFICATE



Verify at coursera.org/verify/S58HYHXLBFQ7

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



01/22/2020

Johnathan Oliver Howard
Napier

has successfully completed

Scalable Machine Learning on Big Data using
Apache Spark

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

A handwritten signature in blue ink, appearing to read 'R. Kienzler'.

Romeo Kienzler
Chief Data Scientist
IBM Watson IoT

COURSE
CERTIFICATE



Verify at coursera.org/verify/S273YP2FWESP
Coursera has confirmed the identity of this individual and
their participation in the course.



3 Courses

Introduction to Artificial
Intelligence (AI)

Getting Started with AI using
IBM Watson

Building AI Powered Chatbots
Without Programming



04/04/2020

Johnathan Oliver Howard Napier

has successfully completed the online, non-credit Specialization

AI Foundations for Everyone

In this specialization learners have developed foundational skills in AI. Learners who have successfully completed this specialization should be able to describe what is AI, its applications and use cases. They should be acquainted with terms like Machine Learning, Deep Learning, etc. The learners should be familiar with the various IBM Watson AI services that enable businesses to apply pre-built AI smarts to their solutions. They should also have knowledge on how to build and deploy web-based intelligent virtual assistants. Learners who have earned this certificate have completed 3 online courses on AI and have demonstrated their competency in Foundations of AI using quizzes and several hands on exercises, including creating and deploying an AI enabled chatbot on a website.

Rav Ahuja
AI & Data Science
Program Director
IBM Skills Network

Antonio Cangiano
Software Developer and
Technical Evangelist
IBM Digital Business
Group

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Verify this certificate at:
coursera.org/verify/specialization/KQEA5FPBRHZ8



6 Courses

Machine Learning with Python

Scalable Machine Learning on
Big Data using Apache Spark

Introduction to Deep Learning &
Neural Networks with Keras

Deep Neural Networks with
PyTorch

Building Deep Learning Models
with TensorFlow

AI Capstone Project with Deep
Learning



02/14/2020

Johnathan Oliver Howard Napier

has successfully completed the online, non-credit Professional
Certificate

IBM AI Engineering

Learners who have completed this 6 course Professional Certificate have a practical understanding of Machine Learning (ML) & Deep Learning (DL). They have technical skills to start a career in AI Engineering, and can:

- Implement ML algorithms including Classification, Regression, Clustering, and Dimensional Reduction using scipy & scikitlearn
- Perform ML on Big Data and deploy ML Algorithms and Pipelines on Apache Spark
- Demonstrate understanding of Deep Learning models such as autoencoders, restricted Boltzmann machines, convolutional networks, recursive neural networks, and recurrent networks
- Build deep learning models and neural networks using Keras, PyTorch and Tensorflow libraries
- Demonstrate ability to present and communicate outcomes of deep learning projects

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.

Romeo Kienzler
Chief Data Scientist
IBM Watson IoT

Joseph Santarcangelo
Senior Data Scientist
IBM

Alex Aklson, Ph.D.
Data Scientist

Saeed Aghabozorgi
Sr. Data Scientist
IBM

Verify this certificate at:

coursera.org/verify/professional-cert/3UBWH534M9SD

**Imperial College
London**

Mar 3, 2022

**Johnathan Oliver Howard
Napier**

has successfully completed

**Introduction to Statistics & Data Analysis in Public
Health**

an online non-credit course authorized by Imperial College London and offered through
Coursera



Professor Alex Bottle
Professor of Medical Statistics
School of Public Health

**COURSE
CERTIFICATE**



Verify at:
coursera.org/verify/9RXKU2GBBGH

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

**Imperial College
London**

Mar 4, 2022

**JOHNATHAN OLIVER-HOWARD
NAPIER**

has successfully completed

Linear Regression in R for Public Health

an online non-credit course authorized by Imperial College London and offered through
Coursera



Professor Alex Bottle
Professor of Medical Statistics
School of Public Health



Dr Victoria Cornelius
Senior Lecturer
Medical Statistics and Clinical Trials

**COURSE
CERTIFICATE**



Verify at:
coursera.org/verify/M6QH6SYBKX3L

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

**Imperial College
London**

Mar 5, 2022

**JOHNATHAN OLIVER-HOWARD
NAPIER**

has successfully completed

Logistic Regression in R for Public Health

an online non-credit course authorized by Imperial College London and offered through
Coursera



Professor Alex Bottle
Professor of Medical Statistics
School of Public Health

**COURSE
CERTIFICATE**



Verify at:
coursera.org/verify/AC9FFEUNBSXN

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

**Imperial College
London**

07/12/2019

**Johnathan Oliver Howard
Napier**

has successfully completed

**Mathematics for Machine Learning: Linear
Algebra**

an online non-credit course authorized by Imperial College London and offered through
Coursera



David Dye and Samuel J. Cooper

**COURSE
CERTIFICATE**



Verify at coursera.org/verify/RN463TN58E5C

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

**Imperial College
London**

07/14/2019

**Johnathan Oliver Howard
Napier**

has successfully completed

**Mathematics for Machine Learning: Multivariate
Calculus**

an online non-credit course authorized by Imperial College London and offered through
Coursera



David Dye and Samuel J. Cooper

**COURSE
CERTIFICATE**



Verify at coursera.org/verify/SNVCCF4LD5TF
Coursera has confirmed the identity of this individual and
their participation in the course.

**Imperial College
London**

07/16/2019

**Johnathan Oliver Howard
Napier**

has successfully completed

Mathematics for Machine Learning: PCA

an online non-credit course authorized by Imperial College London and offered through
Coursera

Marc Deisenroth

Dr.-Ing. Marc Deisenroth
Lecturer in Statistical Machine Learning
Department of Computing
Imperial College London

**COURSE
CERTIFICATE**



Verify at coursera.org/verify/SYYV5E6FPMSC

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

**Imperial College
London**

Mar 6, 2022

**JOHNATHAN OLIVER-HOWARD
NAPIER**

has successfully completed

Survival Analysis in R for Public Health

an online non-credit course authorized by Imperial College London and offered through
Coursera



Professor Alex Bottle
Professor of Medical Statistics
School of Public Health

**COURSE
CERTIFICATE**



Verify at:
coursera.org/verify/TFDPZHDYN4ZT

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



3 Courses

Mathematics for Machine
Learning: Linear Algebra

Mathematics for Machine
Learning: Multivariate Calculus

Mathematics for Machine
Learning: PCA

Imperial College
London

07/16/2019

Johnathan Oliver Howard Napier

has successfully completed the online, non-credit Specialization

Mathematics for Machine Learning

A sequence of 3 courses on the prerequisite mathematics for applications in data science and machine learning. Successful participants learn how to represent data in a linear algebra context and manipulate these objects mathematically. They are able to summarise properties of data sets and map them onto lower dimensional spaces with principal component analysis. Finally they can solve optimisation problems and use this skill to train models for describing data such as simple neural networks.

David Dye
Professor of Metallurgy
Department of Materials
Imperial College London

Samuel J. Cooper
Lecturer
Dyson School of Design
Engineering
Imperial College London

Dr.-Ing. Marc Deisenroth
Lecturer
Department of
Computing
Imperial College London

Verify this certificate at:
coursera.org/verify/specialization/E5PHPHM9J3KM



4 Courses

Introduction to Statistics &
Data Analysis in Public
Health

Linear Regression in R for
Public Health

Logistic Regression in R for
Public Health

Survival Analysis in R for
Public Health

Imperial College
London

Mar 6, 2022

JOHNATHAN OLIVER-HOWARD NAPIER

has successfully completed the online, non-credit Specialization

Statistical Analysis with R for Public Health

This Specialisation comprises four courses on formulating and testing hypotheses, correlation and three main types of regression, including testing model assumptions and dealing with real-world data problems through statistical analysis using R software. Successful participants can appreciate how key statistical concepts such as sample size and how the data were generated are important to modern public health research and practice. They are able to apply appropriate methods in order to formulate and examine statistical associations between variables within a data set using R. Finally, they can interpret the output from their analysis and appraise the role of chance and bias as potential explanations for their results.

Dr Alex Bottle
Reader in Medical
Statistics
Department of Public
Health
imperial College London

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Verify this certificate at:

coursera.org/verify/specialization/TE6E7YNSRAHK



JOHNS HOPKINS
UNIVERSITY

Feb 27, 2022

Johnathan Oliver Howard
Napier

has successfully completed

Algorithms for DNA Sequencing

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

Ben Langmead, PhD
Assistant Professor
Computer Science
Johns Hopkins University

Computer Science
Johns Hopkins University

COURSE
CERTIFICATE



Verify at:

coursera.org/verify/A74XRQ4CE7C8

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

This certificate does not affirm that this learner was enrolled as a student at Johns Hopkins University. It does not confer a JHU grade, course credit or degree; establish a relationship between this learner and JHU; enroll or register this learner at JHU or in any course offered by JHU; or entitle this learner to access or use resources beyond the online courses provided by Coursera.



JOHNS HOPKINS
UNIVERSITY

Jun 27, 2022

JOHNATHAN OLIVER-HOWARD
NAPIER

has successfully completed

Bioconductor for Genomic Data Science

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

Kasper D. Hansen, Ph.D.
Assistant Professor of Biostatistics and Genetic Medicine
Bloomberg School of Public Health
Johns Hopkins University

COURSE
CERTIFICATE



Verify at:

coursera.org/verify/B5M8SPSQUPL9

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

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Mar 2, 2022

Johnathan Oliver Howard
Napier

has successfully completed

Command Line Tools for Genomic Data Science

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

A handwritten signature in black ink, reading "Liliana S. Florea".

Liliana Florea, PhD
McKusick-Nathans Institute of Genetic Medicine
Johns Hopkins University

COURSE
CERTIFICATE



Verify at:
coursera.org/verify/LMMN32JDCW8U

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



JOHNS HOPKINS
UNIVERSITY

05/08/2020

Johnathan Oliver Howard
Napier

has successfully completed

Hypothesis Testing in Public Health

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

A handwritten signature in blue ink, reading "John McGready".

John McGready, PhD, MS
Department of Biostatistics
Bloomberg School of Public Health
Johns Hopkins University

COURSE
CERTIFICATE



Verify at coursera.org/verify/HNKRA59THJUB

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



Jan 20, 2022

Johnathan Oliver Howard
Napier

has successfully completed

Introduction to Genomic Technologies

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

A handwritten signature in black ink, reading "Steven Salzberg".

Steven L. Salzberg, PhD
McKusick-Nathans Institute of Genetic Medicine
Johns Hopkins University

A handwritten signature in black ink, reading "Jeffrey Leek".

Jeffrey Leek, PhD
Department of Biostatistics
Johns Hopkins Bloomberg School of Public Health

COURSE
CERTIFICATE



Verify at coursera.org/verify/R67K2M9ERFC3

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

This certificate does not affirm that this learner was enrolled as a student at Johns Hopkins University. It does not confer a JHU grade, course credit or degree; establish a relationship between this learner and JHU; enroll or register this learner at JHU or in any course offered by JHU; or entitle this learner to access or use resources beyond the online courses provided by Coursera.



JOHNS HOPKINS
UNIVERSITY

05/09/2020

Johnathan Oliver Howard
Napier

has successfully completed

Multiple Regression Analysis in Public Health

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

A handwritten signature in blue ink, reading "John McGready".

John McGready, PhD, MS
Department of Biostatistics
Bloomberg School of Public Health
Johns Hopkins University

COURSE
CERTIFICATE



Verify at coursera.org/verify/CDRNAA996A4E

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



JOHNS HOPKINS
UNIVERSITY

Feb 23, 2022

Johnathan Oliver Howard
Napier

has successfully completed

Python for Genomic Data Science

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

Mihaela Pertea, PhD
McKusick-Nathans Institute of Genetic Medicine
Johns Hopkins University

Steven L. Salzberg, PhD
McKusick-Nathans Institute of Genetic Medicine
Johns Hopkins University

COURSE
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coursera.org/verify/QR5XGEV2K55

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This certificate does not affirm that this learner was enrolled as a student at Johns Hopkins University. It does not confer a JHU grade, course credit or degree; establish a relationship between this learner and JHU; enroll or register this learner at JHU or in any course offered by JHU; or entitle this learner to access or use resources beyond the online courses provided by Coursera.



JOHNS HOPKINS
UNIVERSITY

08/16/2019

Johnathan Oliver Howard
Napier

has successfully completed

R Programming

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

Jeff Leek, PhD; Roger Peng, PhD; Brian Caffo, PhD
Department of Biostatistics
Johns Hopkins Bloomberg School of Public Health

COURSE
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JOHNS HOPKINS
UNIVERSITY

08/22/2019

Johnathan Oliver Howard
Napier

has successfully completed

Regression Models

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

Jeff Leek, PhD; Roger Peng, PhD; Brian Caffo, PhD
Department of Biostatistics
Johns Hopkins Bloomberg School of Public Health

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05/09/2020

**Johnathan Oliver Howard
Napier**

has successfully completed

Simple Regression Analysis in Public Health

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

A handwritten signature in blue ink, reading "John McGready".

John McGready, PhD, MS
Department of Biostatistics
Bloomberg School of Public Health
Johns Hopkins University

**COURSE
CERTIFICATE**



Verify at coursera.org/verify/R8G3YV3V8CKE

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



JOHNS HOPKINS
UNIVERSITY

08/21/2019

Johnathan Oliver Howard
Napier

has successfully completed

Statistical Inference

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

Jeff Leek, PhD; Roger Peng, PhD; Brian Caffo, PhD
Department of Biostatistics
Johns Hopkins Bloomberg School of Public Health

COURSE
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JOHNS HOPKINS
UNIVERSITY

Jun 26, 2022

JOHNATHAN OLIVER-HOWARD
NAPIER

has successfully completed

Statistics for Genomic Data Science

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

Jeffrey Leek, PhD
Department of Biostatistics
Johns Hopkins Bloomberg School of Public Health

COURSE
CERTIFICATE



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JOHNS HOPKINS
UNIVERSITY

05/06/2020

Johnathan Oliver Howard
Napier

has successfully completed

Summary Statistics in Public Health

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

A handwritten signature in blue ink, reading "John McGready".

John McGready, PhD, MS
Department of Biostatistics
Bloomberg School of Public Health
Johns Hopkins University

COURSE
CERTIFICATE



Verify at coursera.org/verify/34ZCUVWHN5LE

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



JOHNS HOPKINS
UNIVERSITY

07/20/2019

Johnathan Oliver Howard
Napier

has successfully completed

The Data Scientist's Toolbox

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

Jeff Leek, PhD; Roger Peng, PhD; Brian Caffo, PhD
Department of Biostatistics
Johns Hopkins Bloomberg School of Public Health

COURSE
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their participation in the course.

Some online courses may draw on material from courses taught on campus but are not equivalent to on-campus courses. This certificate does not affirm that this learner was enrolled as a student at Johns Hopkins University in any way. It does not confer a JHU grade, course credit or degree; establish any relationship between this learner and JHU or other JHU affiliate; enroll or register this learner at JHU or other JHU affiliate or in any course offered by JHU; or entitle this learner to access or use the resources of JHU or other JHU affiliates beyond the online courses provided by Coursera.



4 Courses

Summary Statistics in Public Health

Hypothesis Testing in Public Health

Simple Regression Analysis in Public Health

Multiple Regression Analysis in Public Health



05/09/2020

Johnathan Oliver Howard Napier

has successfully completed the online, non-credit Specialization

Biostatistics in Public Health

In this Specialization, learners developed the ability to calculate key biostatistical measures used throughout public health, the biomedical sciences, and other scientific fields. They also learned to interpret the results from various statistical tests and to think critically about the application of statistical methods to specific research questions and data sets.

John McGready, PhD,
MS
Associate Scientist
Department of
Biostatistics

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/RFX2BKTMMUW4



6 Courses

Introduction to Genomic Technologies

Python for Genomic Data Science

Algorithms for DNA Sequencing

Command Line Tools for Genomic Data Science

Bioconductor for Genomic Data Science

Statistics for Genomic Data Science



Jun 27, 2022

JOHNATHAN OLIVER-HOWARD NAPIER

has successfully completed the online, non-credit Specialization

Genomic Data Science

This specialization covers the concepts and tools to understand, analyze, and interpret data from next generation sequencing experiments. It teaches the most common tools used in genomic data science including how to use the command line, Python, R, Bioconductor, and Galaxy. The sequence is a stand alone introduction to genomic data science or a perfect compliment to a primary degree or postdoc in biology, molecular biology, or genetics.

Jeff Leek, PhD, and
Kasper Daniel Hansen,
PhD, Department of
Biostatistics, Johns
Hopkins Bloomberg
School of Public Health

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Verify this certificate at:

<https://coursera.org/verify/specialization/D5NTLTLWVB6T>



University of Colorado
Boulder

Dec 21, 2024

Johnathan Napier

has successfully completed

Probability Theory: Foundation for Data Science

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

A handwritten signature in black ink, reading "Anne Dougherty".

Senior Instructor
University of Colorado Teaching Professor
Associate Department Chair
Undergraduate Studies Chair

A handwritten signature in black ink, reading "Jem Corcoran".

Jem Corcoran
Associate Professor
Applied Mathematics

COURSE
CERTIFICATE



Verify at:
<https://coursera.org/verify/BLJPOP77Y1HO>

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



University of Colorado

Boulder | Colorado Springs | Denver | Anschutz Medical Campus

03/17/2020

Johnathan Oliver Howard
Napier

has successfully completed

Quantum Mechanics

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

A handwritten signature in black ink, appearing to read 'John W. Daily'.

John W. Daily
Department of Mechanical Engineering
University of Colorado at Boulder

COURSE
CERTIFICATE



Verify at coursera.org/verify/FP2HZCEJAB67

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



University of Colorado
Boulder

Mar 15, 2025

Johnathan Napier

has successfully completed

**Statistical Inference and Hypothesis Testing in
Data Science Applications**

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

A handwritten signature in black ink, appearing to read 'Jem Corcoran'.

Jem Corcoran
Associate Professor
Applied Mathematics

**COURSE
CERTIFICATE**



Verify at:
<https://coursera.org/verify/HCQUXY4H7L5X>

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



University of Colorado
Boulder

Mar 15, 2025

Johnathan Napier

has successfully completed

Statistical Inference for Estimation in Data Science

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

A handwritten signature in black ink, appearing to read 'Jem Corcoran'.

Jem Corcoran
Associate Professor
Applied Mathematics

COURSE
CERTIFICATE



Verify at:
<https://coursera.org/verify/UGYFCA1GPHVC>

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



3 Courses

Probability Theory:
Foundation for Data Science

Statistical Inference for
Estimation in Data Science

Statistical Inference and
Hypothesis Testing in Data
Science Applications



University
of Colorado
Boulder

Mar 15, 2025

Johnathan Napier

has successfully completed the online, non-credit Specialization

Data Science Foundations: Statistical Inference

This program is designed to provide the learner with a solid foundation in probability theory in preparation for the broader study of statistics. It will also introduce the learner to the fundamentals of statistics and statistical theory and will equip the learner with the skills required to perform fundamental statistical analysis of a data set in the R programming language.

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.

John Napier  N. Napier

Verify this certificate at:

<https://coursera.org/verify/specialization/RPWKUAYHSJW5>



05/28/2020

Johnathan Oliver Howard
Napier

has successfully completed

Machine Learning: Classification

a MOOC from the University of Washington and offered through Coursera

A handwritten signature in black ink, reading 'Emily Fox'.

Emily Fox
Amazon Professor of Machine Learning
Statistics

A handwritten signature in black ink, reading 'Carlos Guestrin'.

Carlos Guestrin
Amazon Professor of Machine Learning
Computer Science and Engineering

COURSE
CERTIFICATE



Verify at coursera.org/verify/W36TTEYJGMEL

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



05/30/2020

Johnathan Oliver Howard
Napier

has successfully completed

Machine Learning: Clustering & Retrieval

a MOOC from the University of Washington and offered through Coursera

A handwritten signature in black ink, reading 'Emily Fox'.

Emily Fox
Amazon Professor of Machine Learning
Statistics

A handwritten signature in black ink, reading 'Carlos Guestrin'.

Carlos Guestrin
Amazon Professor of Machine Learning
Computer Science and Engineering

COURSE
CERTIFICATE



Verify at coursera.org/verify/GCU8ET5E2GRY

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



05/22/2020

Johnathan Oliver Howard
Napier

has successfully completed

Machine Learning: Regression

a MOOC from the University of Washington and offered through Coursera

A handwritten signature in black ink, reading 'Emily Fox'.

Emily Fox
Amazon Professor of Machine Learning
Statistics

A handwritten signature in black ink, reading 'Carlos Guestrin'.

Carlos Guestrin
Amazon Professor of Machine Learning
Computer Science and Engineering

COURSE
CERTIFICATE



Verify at coursera.org/verify/DCBK3MNML9L6

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



05/17/2020

Johnathan Oliver Howard
Napier

has successfully completed

Machine Learning Foundations: A Case Study
Approach

a MOOC from the University of Washington and offered through Coursera

A handwritten signature in black ink, reading 'Emily Fox'.

Emily Fox
Amazon Professor of Machine Learning
Statistics

A handwritten signature in black ink, reading 'Carlos Guestrin'.

Carlos Guestrin
Amazon Professor of Machine Learning
Computer Science and Engineering

COURSE
CERTIFICATE



Verify at coursera.org/verify/222RXPJJRMQ

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



4 Courses

Machine Learning Foundations:
A Case Study Approach

Machine Learning: Regression

Machine Learning:
Classification

Machine Learning: Clustering &
Retrieval



05/30/2020

Johnathan Oliver Howard Napier

has successfully completed the online, non-credit Specialization

Machine Learning

Congratulations! This Certificate establishes that you have demonstrated proficiency in the exciting, high-demand field of Machine Learning through rigorous online coursework from leading Machine Learning researchers at the University of Washington. Through a series of practical case studies, you gained applied experience in major areas of Machine Learning including Prediction, Classification, Clustering, and Information Retrieval. You learned to analyze large and complex datasets, create systems that adapt and improve over time, and build intelligent applications that can make predictions from data. Take pride in your accomplishment and welcome to the global Machine Learning community!

Emily Fox, Amazon
Professor of Machine
Learning, Statistics
Carlos Guestrin, Amazon
Professor of Machine
Learning, Computer
Science and Engineering

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Verify this certificate at:
coursera.org/verify/specialization/625MSLWJ92RU



01/14/2020

Johnathan Oliver Howard
Napier

has successfully completed

Introduction to Machine Learning

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

*Genevieve M. Lipp David Carlson
Larry Carin*

Genevieve M. Lipp
David Carlson
Lawrence Carin

COURSE
CERTIFICATE



Verify at coursera.org/verify/QZ5VQ5LXAE2U
Coursera has confirmed the identity of this individual and
their participation in the course.



03/29/2020

Johnathan Oliver Howard Napier

has successfully completed

How Google does Machine Learning

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

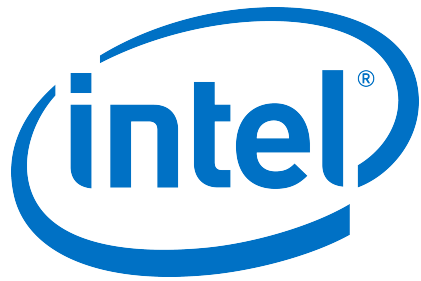
Google Cloud Training

COURSE CERTIFICATE



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



01/17/2020

Johnathan Oliver Howard
Napier

has successfully completed

An Introduction to Practical Deep Learning

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

A handwritten signature in blue ink, reading "Andres Rodriguez".

A handwritten signature in blue ink, reading "Nikhil Murthy".

Andres Rodriguez and Nikhil Murthy

COURSE
CERTIFICATE



Verify at coursera.org/verify/W36HWX4S7XQP

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

Stanford | ONLINE

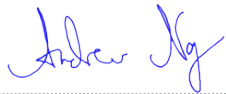
03/03/2020

Johnathan Oliver Howard
Napier

has successfully completed

Machine Learning

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



Associate Professor Andrew Ng
Computer Science Department
Stanford University

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Verify at coursera.org/verify/6RTJ567J25LX

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



12/26/2019

Johnathan Oliver Howard
Napier

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 coursera.org/verify/9YNFW682RHVL

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