Microsoft

ALVIN RINDRA FAZRIE

has successfully passed all requirements for

Microsoft Certified: Azure Data Scientist Associate

Credential ID: EECA8947AECBB75A

Certification number: 04F1GD-20B049

Earned on: July 31, 2023

Expires on: August 1, 2025

Online Verifiable

Satya Narayana Nadella

Google Cloud

This acknowledges that

Alvin Rindra Fazrie

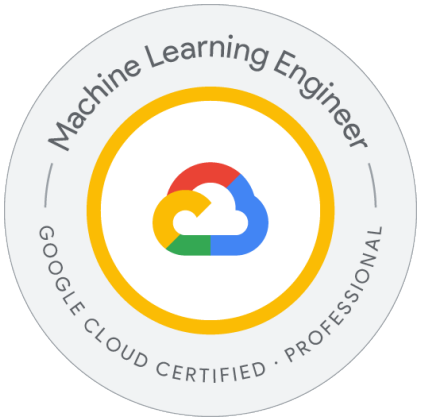
has successfully completed all the requirements to be recognized as

Google Cloud Certified

Professional Machine Learning Engineer

Series ID: 1769
Issue Date: 6 Apr 2022
Expiration Date: 6 Apr 2024
Certification ID: uacvZB
Certified As: Alvin Rindra Fazrie

Thomas Kurian
CEO, Google Cloud

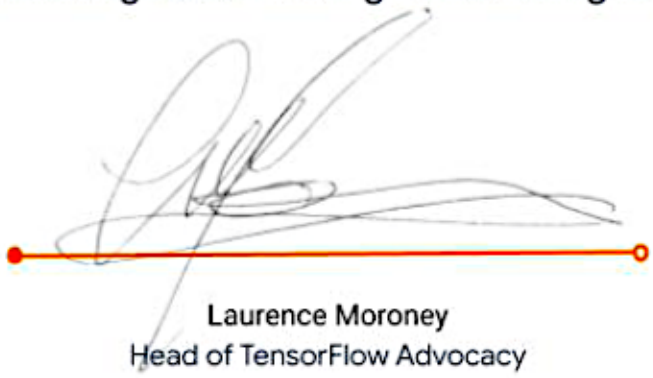


TensorFlow Developer Certificate

This certifies that

Alvin Rindra Fazrie

has passed the TensorFlow Developer Certificate exam covering foundational, practical machine learning skills through the building and training of models using TensorFlow.



Laurence Moroney
Head of TensorFlow Advocacy

Issue Date	Expiration Date	Certificate ID
July 9, 2020	July 9, 2023	20460205

TensorFlow

Google Cloud

COURSE CERTIFICATE

Jan 2, 2022

ALVIN RINDRA FAZRIE

has successfully completed

Production Machine Learning Systems

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

Google Cloud Training

Verify at:
https://coursera.org/verify/BQ2QJPZ7KXXP

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

Google Cloud

5 Courses

- Google Cloud Platform Big Data and Machine Learning Fundamentals
- Modernizing Data Lakes and Data Warehouses with GCP
- Building Batch Data Pipelines on GCP
- Building Resilient Streaming Analytics Systems on GCP
- Smart Analytics, Machine Learning, and AI on GCP

05/21/2020

Google Cloud Training

ALVIN RINDRA FAZRIE

has successfully completed the online, non-credit Specialization

Data Engineering, Big Data, and Machine Learning on GCP

This five-course accelerated specialization is designed for data professionals who are responsible for designing, building, analyzing, and optimizing big data solutions. Through a combination of video lectures, quizzes, and hands-on labs, learners carried out serverless data analysis and productionize machine learning models. This specialization is designed to give learners a robust hands-on experience and is primarily lab-focused.

Verify this certificate at:
coursera.org/verify/specialization/TEHF4MZF3Q7Z

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

09/10/2018

ALVIN RINDRA FAZRIE

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

Verify this certificate at:
coursera.org/verify/specialization/DXLWRFC2C9TL

UNIVERSITÄT DUISBURG ESSEN

Offen im Denken

rca Ruhr Campus Academy gGmbH

ERP4 STUDENTS

UNIVERSITÄTS-zertifikat

University Certificate

Mr.

Alvin Rindra Fazrie

has successfully attended the course

Advanced ABAP Programming

during Winter Term 2016/17 and has obtained the certificate of performance.

Scientific Director
Faculty of Economics and Business Administration
Univ.-Prof. Dr. Heimo H. Adelsberger

Universität Duisburg-Essen 109

Essen 21. MRZ. 2017

SAP University Alliances

University Certificate *Advanced ABAP Programming*
Alvin Rindra Fazrie

The goal of the course *Advanced ABAP Programming* is to provide comprehensive and advanced concepts of ABAP programming to deepen the technical and methodological qualification of young professionals who use or plan to use ABAP for object-oriented programming in the field of SAP.

The workload for the course is 180 hours. This corresponds to 6 credit points according to the European Credit Transfer System (ECTS).

The course deals with the following topics:

- Theoretical foundation and practical programming of detailed case studies in ABAP. The following areas are covered:
  - Introduction to concepts of object-oriented programming in ABAP
    - Objects and classes
    - Modelling with UML
  - Object-oriented programming concepts
    - Inheritance
    - Abstract Classes and Interfaces
    - Event Handling
  - Tools and special concepts of object-oriented programming
    - Global Classes with the Class Builder
    - Patterns and Friendship Relations
    - Shared Objects
    - Class-based Exceptions
  - Customization of the SAP system
    - Customer Exits
    - Classical Business Add-Ins
    - Modifications
    - Customizing with the new extension concept
  - Web Dynpro
    - Controllers, Contexts and Views
    - Programming in Components
    - Internationalization and Messages
  - Further enlarging concepts
    - ALV Grid Control
    - ABAP and Unicode
    - Dynamic Programming with Field Symbols and Data References

The certificate is handed out after successful completion of the case studies.

UNIVERSITÄT DUISBURG ESSEN

Offen im Denken

RUHR CAMPUS ACADEMY

ERP4 STUDENTS

UNIVERSITÄTS-zertifikat

University Certificate

Faculty of Economics and Business Administration

Mr.

Alvin Rindra Fazrie

has successfully attended the course

Introduction to SAP BW

during Summer Term 2015 and has obtained the certificate of performance.

Dean of the Faculty of Economics and Business Administration
Univ.-Prof. Dr. Volker Clausen

Scientific Director
Univ.-Prof. Dr. Heimo H. Adelsberger

Universität Duisburg-Essen 109

Essen 18.09.2015

SAP University Alliances

University Certificate *Introduction to SAP BW*
Alvin Rindra Fazrie

The goal of the course *Introduction to SAP BW* is to provide professional and methodical qualifications for specialists who operate or plan to operate SAP BW in their daily work.

The workload for the course is 180 hours. This corresponds to 6 credit points according to the European Credit Transfer System (ECTS).

The course deals with the following topics:

- Introduction to the standard software SAP BW
  - Overview of the software vendor SAP, the technical and functional framework of SAP BW and IDES
  - Handling of SAP BW (SAP GUI – Graphical User Interface, Navigation, Help Function, Remote-Login)
- Theoretical foundation and practical processing of interactive case studies in an SAP BW System. The following areas are covered:
  - SAP BW - Enterprise Data Warehousing
    - Basic Objects in the BI-Data-Warehouse-Layer
    - Acquisition and Preparation of Data from SAP Source Systems
    - Acquisition of Data from other System
    - Business Content
    - Further Providers
    - Administration of Data Targets
    - Optimization of the Query-Performance
  - SAP BW Reporting and Query Design
    - Introduction to BI Enterprise Reporting
    - SAP BW BEx Query Designer
    - Key Figures
    - Characteristics
    - Variables
    - Exceptions and Requirements
    - SAP BI BEx Analyzer and BEx Web Analyzer
    - Information Broadcasting
    - Enterprise-Portal-Integration Document Integration
    - Report-Report-Interface
    - Managing Query-Objects
    - Business Content
    - Further Reporting Tools in SAP BI

The certificate is handed out after successful completion of the case studies.