



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,  
RISET, DAN TEKNOLOGI



BA23/GRAD/XXIII-07/M151DSX1875

## Certificate of Completion

is proudly presented to

# Syazwandy Harahap

for successfully completing **Bangkit**, specializing in **Machine Learning**.

Bangkit is a Google-led academy designed to produce high-caliber technical talent for world-class Indonesian technology companies and startups.

July 27, 2023

*Dora S.*

**Dora Songco**

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Product Marketing Manager  
Google Indonesia





## STUDENT LEARNING ACHIEVEMENT

Bangkit ID : M151DSX1875  
Name : Syazwandy Harahap  
University : Universitas Brawijaya

Bangkit Completion : Full Graduate  
Learning Path : Machine Learning  
Capstone Status : Finished

No	Courses/Specialization/Activities	Learning Outcomes	Hours	Score (0-100)	Score Description
1	IT Automation with Python	By the end of the course, the student will be able to comprehend the knowledge of building Python programs and how to automate general tasks by writing Python scripts.	50	94	The student well comprehends the knowledge of building Python programs and how to automate general tasks by writing Python scripts.
2	Data Analytics	By the end of the course, the student will be able to grasp the learning material related to data cleansing, problem-solving, critical thinking, data ethics, and data visualization.	78	92	The student is competent to grasp the learning material related to data cleansing, problem-solving, critical thinking, data ethics, and data visualization.
3	Mathematics for Machine Learning	By the end of the course, the student will be able to understand the study process towards acquiring the prerequisite mathematical knowledge needed to continue the learning journey and take more advanced courses in machine learning.	58	93	The student can well understand the study process towards acquiring the prerequisite mathematical knowledge needed to continue the learning journey and take more advanced courses in machine learning.
4	Machine Learning Specialization by Andrew Ng	By the end of the course, the student will be able to comprehend the fundamental concepts of Machine Learning (Build ML models with NumPy & scikit-learn, supervised models, unsupervised, and use decision trees), and also understands the application of machine learning to solve real-world problems.	89	96	The student masters the fundamental concepts (Build ML models with NumPy & scikit-learn, supervised models, unsupervised, and use decision trees), and also understands the application of machine learning to solve real-world problems.
5	TensorFlow Developer Professional Certificate	By the end of the course, the student will be able to apply TensorFlow skills (NLP, Neural Network) to various problems and projects.	85	95	The student is capable of applying TensorFlow skills (NLP, Neural Network) to various problems and projects.
6	Structuring Machine Learning Projects	By the end of the course, the student will be able to execute the end-to-end workflow from the Machine Learning project.	9	83	The student is skilled in executing the end-to-end workflow from the Machine Learning project.
7	Tensorflow Data and Deployment	By the end of the course, the student will be able to deploy Machine Learning models on the web.	71	95	The student is adept at deploying Machine Learning models on the web.
8	Preparing for Tensorflow Developer Certification	By the end of the course, the student will be able to prepare themselves to take the TensorFlow Developer Certificate exam	25	100	The student has carefully prepared themselves to take the TensorFlow Developer Certificate exam
9	Capstone / Final Project	By the end of the course, the student will be able to begin stages of a final project, namely developing an application/solution which validates their product development skills and boosts the portfolio.	200	85	The student is competent to begin stages of a final project, namely developing an application/solution which validates their product development skills and boosts the portfolio.
10	Soft skill & Career Development	By the end of the course, the student will be able to comprehend Life Path, Growth Mindset, The Power of Feedback, Time Management, Critical Thinking, Problem Solving, Adaptability, Resilience, Project Management, Professional Communication, Networking, Digital Branding, and Interview Communication	236	97	The student thoroughly comprehends Life Path, Growth Mindset, The Power of Feedback, Time Management, Critical Thinking, Problem Solving, Adaptability, Resilience, Project Management, Professional Communication, Networking, Digital Branding, and Interview Communication