

BMSW4001

My Intended career as Machine Learning Engineer



Denislav Kostov

Module number: BMSW4001

Student ID: 2022464

Lecturer: Timothy Hopkins

Assignment Part 1

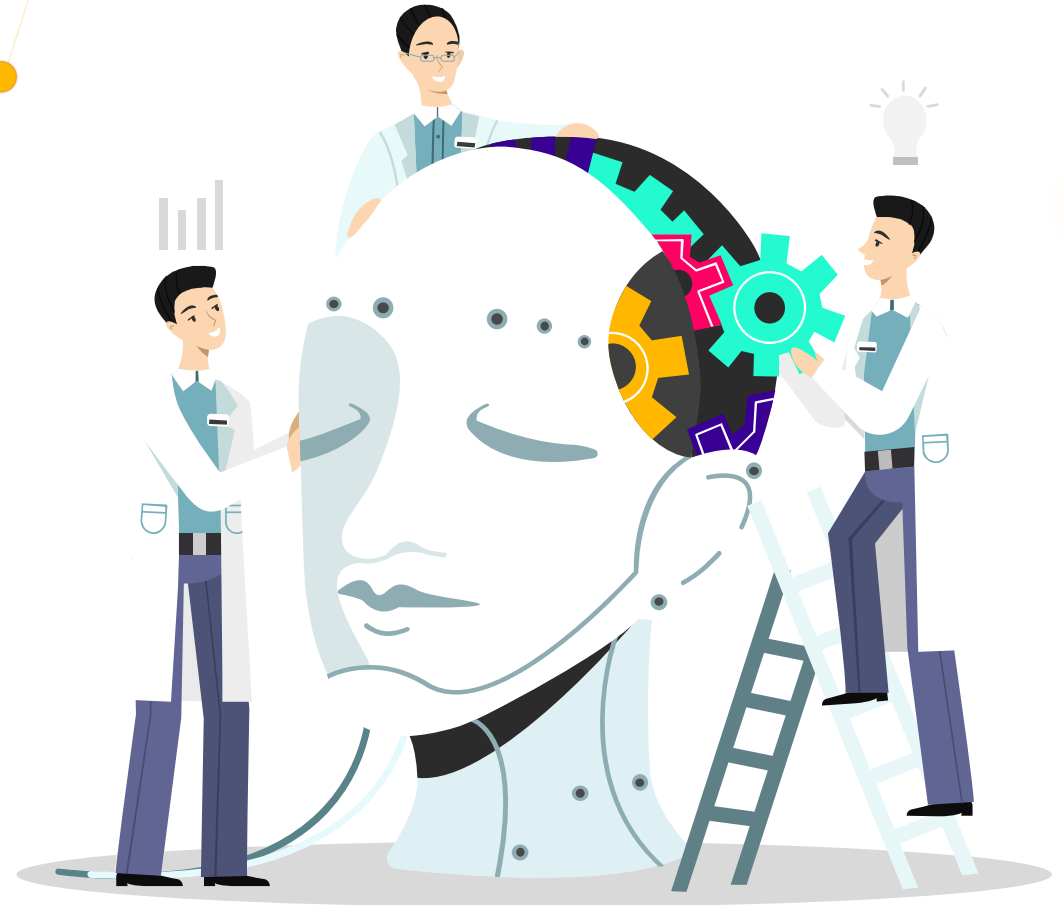
ACE TERM 1 G2



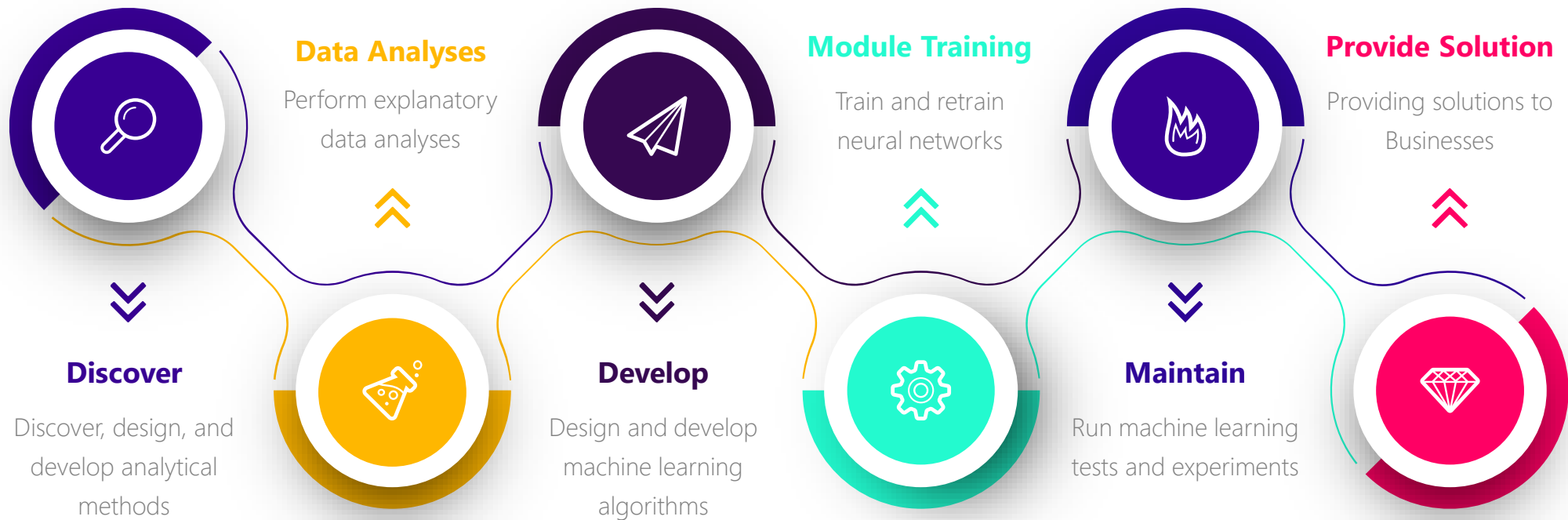
Machine Learning Engineer

Machine Learning

Machine Learning Engineer is a professional specialized in developing Machine learning, a branch of computer science that focuses on developing algorithms which can “learn” from or adapt to the data and make predictions.



Responsibilities and duties





Machine Learning Engineer

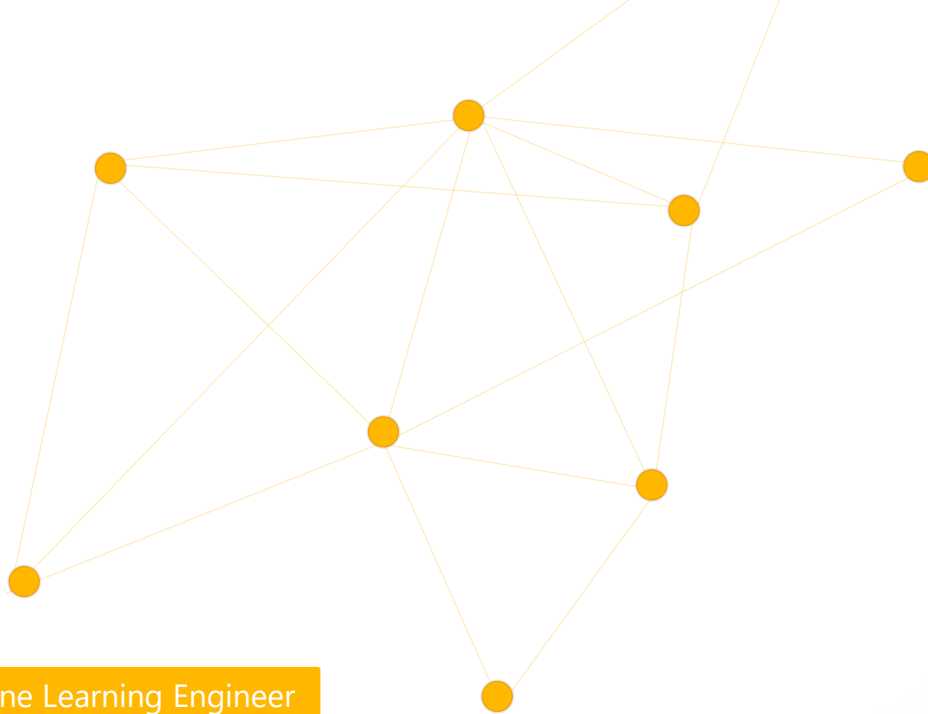
Required Technical Skills

Essential Skills

- Applied Mathematics
- Neural Network Architecture
- Physics
- Data Modeling and Evaluation
- Advances Signal Processing
- Natural Language Processing
- Audio and Video Processing
- Reinforcement Learning

Programming Languages

- Python
- C++
- Java / JavaScript
- Scala
- GO
- TypeScript
- Julia
- Shell



Machine Learning Engineer

Required Tools to master

In addition to a solid understanding of programming and scripting languages such as Python, SQL, Java, and C++, many machine learning engineers are also proficient in the following programs and tools:

Key Tools

- ✓ TensorFlow
- ✓ Google Cloud ML Engine
- ✓ Amazon Machine Learning
- ✓ IBM Watson
- ✓ PytorchJupyter Notebook



Thirst for learning

constantly
refreshing your
toolkit and open to
learning new skills.



Teamwork

The ability to collaborate with others and
contribute to a supportive work environment



Communication

The ability to
communicate
information accurately
and clearly



Machine Learning Engineer

Required Soft Skills

Soft skills are what set apart effective engineers from those who flounder. While machine learning engineering is, at its core, a technical job, soft skills such as the ability to clearly communicate, problem solve, manage time, and collaborate with others are what lead to a project's successful completion and delivery.

S.W.O.T Analysis

Develop Strategy



What Is A S.W.O.T Analysis?

SWOT stands for Strengths, Weaknesses, Opportunities, and Threats, and so a SWOT Analysis is a technique for assessing these four aspects of your business.



S

Strength

Personal S.W.O.T Analysis

S.W.O.T

Applied Mathematics

- Linear algebra
- Probability Theory and Statistics
- Multivariate Calculus
- Algorithms and Optimization

Soft Skills

- Domain knowledge
- Communication Skills
- Problem-solving skills
- Time management

Programming Skills

- Computer Science Fundamentals and Programming
- Software Engineering and System Design
- Machine Learning Algorithms and Libraries
- Distributed computing

W

Weakness

Personal S.W.O.T Analysis

S.W.O.T

Education

- Lack of appropriate education
- Lack of certain certificates

Personality

- Emotional
- Perfectionist
- Can appear shy in front of large groups
- Compulsiveness sometimes leads me to resent being assigned assignments, i.e., the burden of several tasks and the need to complete each diligently will cause me to think negatively about the individuals and/or situation that created the job.



Opportunities

Personal S.W.O.T Analysis

S.W.O.T

Career

- Immeasurable opportunities in the field of computer science
- Machine Learning Engineers are in demand for the businesses
- Artificial intelligence is gaining more and more popularity in the everyday life of ordinary people.

In Personal Plan

- Good reward
- Good opportunity for development both in career and personal growth
- Opportunity to work with advanced technologies
- Ability to find solutions to complex automated tasks and make technologies more understandable and close to people



Threats

Personal S.W.O.T Analysis

S.W.O.T

Personal Threads

- Rejection
- Overload of information
- The need for daily updating of knowledge can lead to stress
- Big time consumer

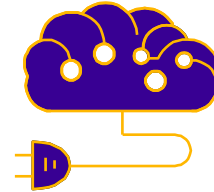
Career Threads

- Such professions are new and extremely expensive for medium and small businesses and this can lead to difficulty finding a market or finding a job

Tips to Build A Successful Career

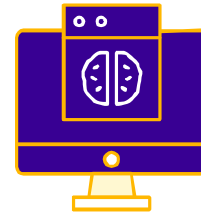
Successful Career

A good career will provide us with many rewards and genuine earning opportunities. As we live in a society defined by social class and wealth, climbing the social ladder would undoubtedly increase the quality of life. There are many reasons why anyone would want success.



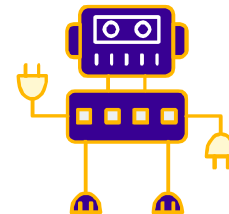
Identify with Your Goals

Although aligning your priorities requires time and commitment, it is a critical step in any effective person's path.



Become Aware of Your Strengths

It is preferable if you chose your long-term career based on what you feel about yourself. Will you be able to stay in an office for eight to twelve hours a day and work on a computer?



Always Raise Your Standards

If the goals are set high, you will never be content by anything less than what you are capable of. Individuals with high expectations are often more competitive than the average.

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Thank
you

References

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