## NILABJA SARKAR

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### **EDUCATION**

M.TECH Computer Science, University of Hyderabad

Expected 2023

Relevant Coursework: Computer Networks, Operating Systems, Algorithms, Deep learning.

GPA: 8.5

B.TECH Information Technology, Jalpaiguri Govt. Engineering College

2014 - 2018

Relevant Coursework: Database, SQL, Programming and Data Structure, XML

GPA: 8.3

#### SKILLS

Programming Skills Technical Skills C, C++, JAVA, Python, JAVAscript, Object Oriented Programming(oops).

Kubernetes(k8s), Linux, Git, Docker, CI/CD, , SDLC

### EXPERIENCE

# Software Developer Intern

Aug 2022 - Jul 2023

ACL digital

Hyderabad, India

- I accomplished successful implementation of Kubernetes projects by efficiently managing YAML files, deploying applications, and creating docker images.
- I accomplished the development of a JavaScript and Node.js application in the backend, seamlessly connecting it with a Docker container housing a MongoDB database.
- Worked collaboratively in a 5-member team to explore and validate use cases for gateway API.

### **PROJECTS**

Automatic Fish Detection. In this project we developed a solution for image classification of fish species found in Indian seas.

- Implemented transfer learning models (MobileNet V2, ResNet-50, VGG-19) to classify six tuna fish species and achieved 97% accuracy. Used augmentation techniques to increase data-set volume and model performance.
- As a Team project we have Collected and curated a unique data-set of Indian sea fish species (6000 image data) sample, Training data-set on our own.
- Used TensorFlow, OpenCV, Python, Fast.AI, PyTorch, Keras, NumPy, scikit-learn, Matplotlib, Seaborn, Pillow.

MAZE solver Visualization. • Designed a visual maze solver using Python and Tkinter. Performed Unit Testing

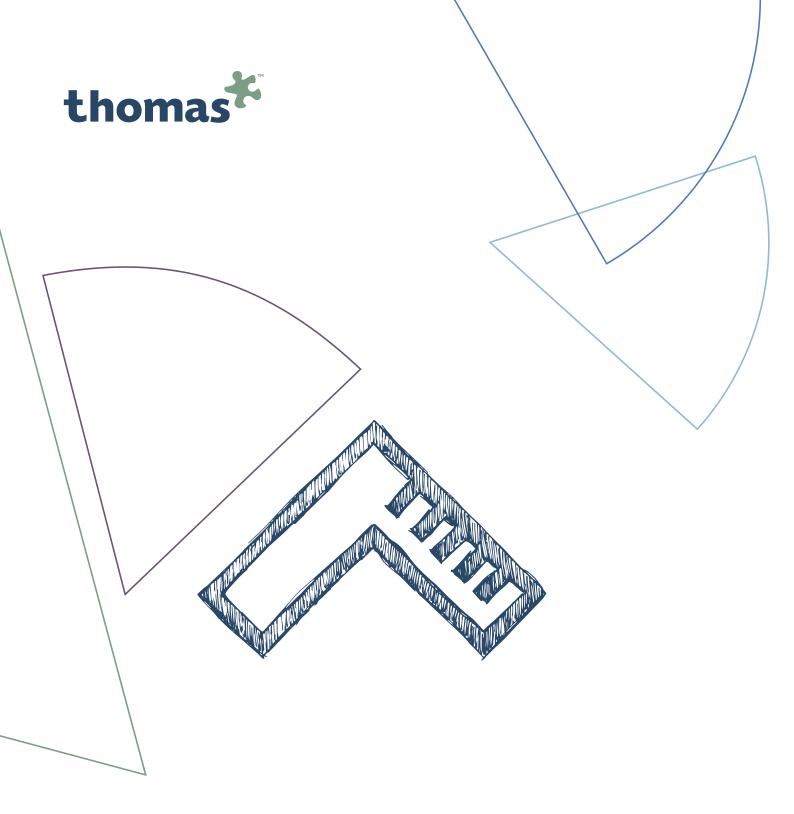
- It draws a randomized maze using BFS algorithm and then systematically solves it.
- Here I have used Breath first search(BFS) and Depth first Search(DFS) algorithms.

Password Checker. Developed a secure password checker tool using python and a Pwned Password API

- Implemented an API integration that allows users to verify if their passwords have ever been compromised in data breaches.
- This tool provides valuable insights and helps users identify the need for password updates or improvements to enhance their online security.

### **EXTRA-CURRICULAR ACTIVITIES**

- 1st Prize in Smart India Hackathon, outperforming 150 participants at University of Hyderabad. Demonstrated exceptional problem-solving, innovation, and teamwork, showcasing dedication to excellence.
- Volunteer Experience: Teacher at Jyoti(NGO JGEC).(2016-2018)



# Nilabja Sarkar General Intelligence Assessment (GIA)

Candidate Feedback

21/07/2023 Private & Confidential



# Nilabja Sarkar

# **General Intelligence Assessment (GIA)**



### What is a GIA?

The Thomas International GIA measures vour aptitudes is five main areas: Reasoning, Perceptual Speed, Number Speed & Accuracy, Word Meaning and Spatial Visualisation. Your performance on these tests provides a robust indication of your problem-solving capabilities and the speed with which you can acquire new information. This report provides you with a narrative overview of your performance on each of the five tests of the GIA and will highlight strategies you could use to be more effective. It is important to note, that there are no good or bad profiles based on GIA scores, as both high and low scores can be suitable for different job roles or work environments.

The five tests of the GIA are scored based on a combination of speed and accuracy, which are equally important. Each test of the GIA continues to present you with tasks until the test finishes. It is important to remember that aptitudes and abilities should be considered in the context of practical experience, acquired skills, behavioural and personality characteristics.

Please note: If there is any reason why your performance on the GIA may have been negatively affected and not a true reflection of your aptitudes and ability, please inform the person or company that asked you to complete the GIA.



### Reasoning



The GIA Reasoning test is a problem-solving task. Your verbal reasoning is measured by asking you to hold verbal information in your short-term memory and make decisions based on that information. Reasoning assesses your ability to make inferences, to reason from verbal information and to draw correct conclusions.



Your test performance indicates that your ability to reason quickly and accurately from verbal information is lower than the majority of people. You may find it harder to hold lots of information in your short-term memory and will take more time to draw accurate conclusions during conversations with others.

There are several points to consider and strategies that you can use to be more effective, based on your performance on the Reasoning test:

- Rehearsing answers to likely objections, responses or scenarios can help you to be more effective during presentations, discussions or negotiations.
- Some people will process verbal information quicker than you.
  Summarising the requests made by others allows you to check your understanding of their requirements, reducing the chance of errors being made.
- Requesting information in advance of a discussion or meeting will give you time to consider the details and consider your interpretation.



### **Perceptual Speed**



The GIA Perceptual Speed test is a matching task. Your perceptual speed is measured by asking you to identify the correct number of matching pairs of letters or characters. Perceptual Speed assesses your ability to check and report for error/accuracy in written material, numbers and diagrams as well as the ability to ignore irrelevant information.



Your test performance indicates that you are not as fast as the majority of people at identifying inaccuracies in written material, numbers and diagrams. You may find it harder to identify errors and mismatches in information if you are not focusing your attention in that area. It's likely that you will prefer to read and check information thoroughly.

There are several points to consider and strategies that you can use to be more effective, based on your performance on the Perceptual Speed test:

- Ensure that there is someone to double-check your work for errors and mistakes. You can become familiar with your own work and miss things that someone else might perceive, allowing you to make corrections.
- You are more likely to make errors when rushing. Although time pressure will happen, when you're in control of your schedule make sure that you have adequate time to review important content and figures.
- You may find that seeking-out speed-reading techniques advantageous if you would like to process written material more quickly.



### **Number Speed & Accuracy**



The GIA Number Speed & Accuracy test is a number task. Your numerical reasoning is measured by asking you to identify the magnitude of distance between a series of numbers. Number Speed & Accuracy assesses your ability to manipulate numerical information, your numerical reasoning and how comfortably you can work with quantitative concepts.



Your test performance indicates that you are not as fast at manipulating numerical information and working with quantitative concepts as the majority of people. Your numerical reasoning suggests that you will take longer to process numbers and conduct mental arithmetic than others.

There are several points to consider and strategies that you can use to be more effective, based on your performance on the Number Speed & Accuracy test:

- Creating templates, worksheets and formulas can reduce your reliance on mental arithmetic and increase the efficiency and accuracy of your calculations.
- Requesting others to present numerical information in a different format, such as charts, graphs and tables can help you to process numerical information more quickly.
- When planning your work, remember to ensure adequate time for quality checking, especially when conducting calculations or working with numerical concepts.



### **Word Meaning**



The GIA Word Meaning test is a semantic word task. Your vocabulary and understanding of words is measured by asking you to identify two words that have a similar meaning out of a choice of three. Word Meaning assesses your comprehension of a large number of words from different parts of speech and the ability to process written and verbal information.



Your test performance indicates that your comprehension of words and complex written or verbal information is not as high as the majority of people. You are likely to have a narrow vocabulary and use less complicated language in your speech and writing.

There are several points to consider and strategies that you can use to be more effective, based on your performance on the Word Meaning test:

- Requesting that others reinforce their points with visuals, graphs, charts or process diagrams can help you process the main points being put across when someone frequently uses technical language to explain themselves.
- You are likely to articulate yourself in a way that is easily accessible to other peope, avoiding complicated language. You may work well with people who use technical language when there is a requirement to translate their points into terms that most people can understand.
- When working with others, ensure that you ask for clear written or verbal instructions to avoid misinterpreting ambiguous information and clarifying exactly what is expected.



### **Spatial Visualisation**



The GIA Spatial Visualisation test is a symbol task. Your spatial and mechanical reasoning is measured by asking you to visualise and manipulate a symbol in your mind. Spatial Visualisation assesses your ability to create and manipulate mental images of objects and to understand how shapes and patterns fit together to form a whole.



Your test performance indicates that your ability to visualise and manipulate images and concepts in your mind is the same as the majority of people. You will find as easy as most to interpret complicated visual information such as graphs, charts, maps and blueprints.

There are several points to consider and strategies that you can use to be more effective, based on your performance on the Spatial Visualisation test:

- You are likely to interpret information presented visually quicker than some people. Remember that others may take more time to process and reason from the same information and may require the information to be articulated verbally to aid comprehension.
- If you prefer to present ideas using diagrams, graphs and charts, keep in mind that not all information needs to be presented in a visuallyappealing format. Sometimes keeping things simple can get your ideas across in a more concise manner.
- Your aptitude in this area is the same as most people. When working in groups, you can add value by ensuring information presented visually is in a format that the majority of people would be able to understand, rather than relying too much, or too little on visual content.



This report has aimed to provide you with an overview of your cognitive aptitudes and abilities based on the Thomas International GIA. If you are interested in learning more about the GIA you can find more information here.

If you have any questions about this report or about how this information will be used, please contact the person who asked you to complete the GIA.