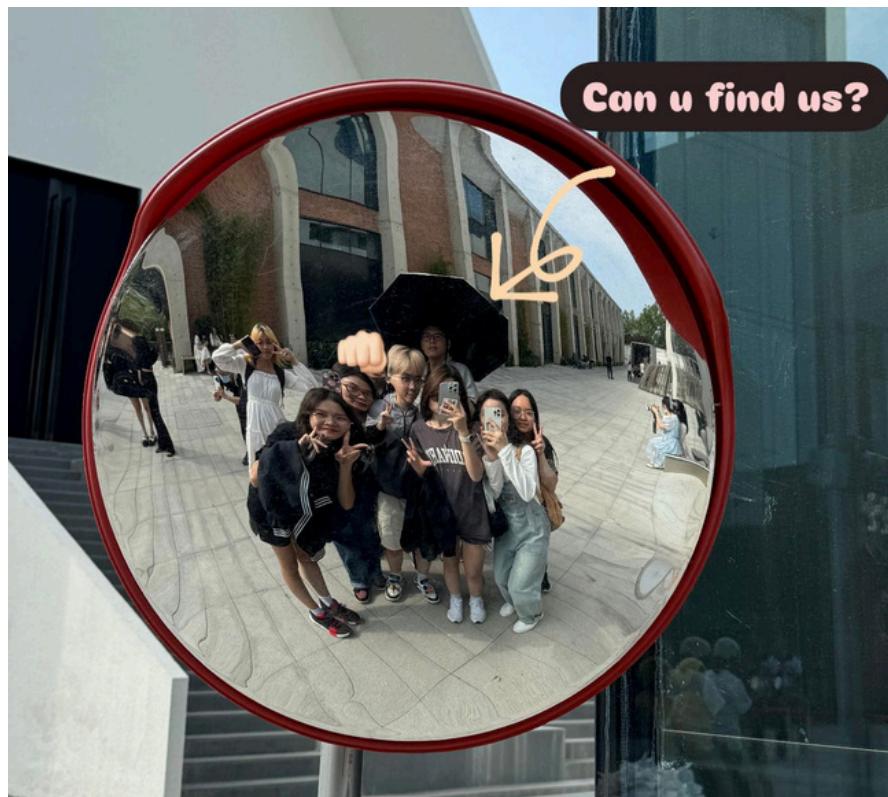
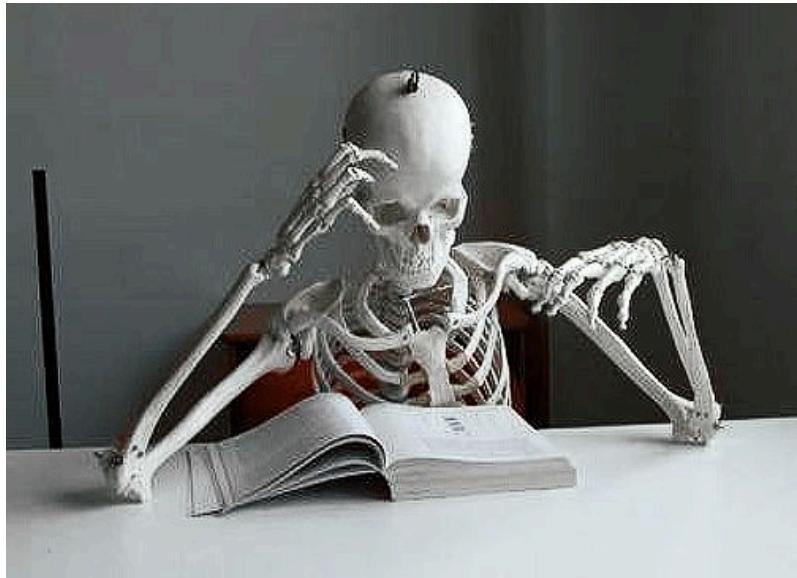


LOW TECH  
HIGH PRODUCTIVITY

# A LETTER FROM OUR TEAM

Meet the Low Tech team, a group of five brave Vietnamese souls navigating the turbulent seas of "Big Data and Connectionist AI" without a map, compass, or even a faint sense of direction. None of us are tech experts (in fact, we consider changing the Wi-Fi password to be a major technological breakthrough), but we're determined to tackle this project with a mix of curiosity, persistence, and a healthy dose of confusion.





Our project log is more of a survival journal—a record of everything we've done (and mostly, what we've tried to figure out). Think of it as a scrapbook of our collective journey through the labyrinth of data analytics and AI models, sprinkled with moments of realization, missteps, and probably more coffee spills than actual coding. From deciphering complex algorithms to wondering if "neural networks" actually involve real brains, the Low Tech team is here to prove that you don't need to be a tech wizard to dive into the world of AI—you just need optimism, a sense of humor, and possibly a magic 8-ball for decision-making.

# MEMBERS



CIO - BAOCHI

姓名：吴宝芝  
“Don't be lazy in it!”



WRITER AND TESTER - LIAM

姓名：武皇宝玉  
“It's sad enough, cry now”



CEO - SWANIE

姓名：阮天娥  
“Go big or go home”



CTO - DARA

姓名：武皇宝玉  
“Procrastination is life”



DESIGNER - HARVIE

姓名：张玉河  
“I didn't choose the nap life, the nap life chose me”



# INTRODUCTION

Reporting period:  
20/09/2024 - 28/09/2024

# TABLE OF CONTENTS

◆ When and what was done?

---

◆ What were lessons learned?

---

◆ What were the issues to be resolved?

---

◆ Next steps  
(Proof on last page)

**Date: 20/09/2024**

**Location: Lecture Bulding**

### **WHAT WAS DONE?**

- ✦ Choose team members
- ✦ Make a WeChat group
- ✦ Discuss to select one of the modules
- ✦ Having dinner together

### **WHAT ARE LESSONS LEARNED?**

- ✦ Such a good idea to work with our people
- ✦ Realize that although we are just tech-mortals but diligence will beat everything (hope so)

### **WHAT WERE THE ISSUES TO BE RESOLVED?**

- ✦ Nothing bad happened at the first day



### **NEXT STEP**

- ✦ First meeting
- ✦ Get to know team members
- ✦ First task deliveries and task owners
- ✦ Discuss about future plans

\*gang gang



Timeline Tasks for Project Log							Person in charge
Content	Content	Person in charge	LINK document with proof	Deadline	Check	Fix	
1. Introduction to Big Data	NGUYEN VINH TUNG LAM			10AM 26/9/2024	<input type="checkbox"/>	<input type="checkbox"/>	
2. Big Data Technologies	NGUYEN THIEN NGA			10AM 26/9/2024	<input type="checkbox"/>	<input type="checkbox"/>	
3. Data Processing and Analytics	NGO BAO CHI			10AM 26/9/2024	<input type="checkbox"/>	<input type="checkbox"/>	
4. Data Analysis and Visualization	TRUONG NGOC HA			10AM 26/9/2024	<input type="checkbox"/>	<input type="checkbox"/>	
5. Big Data Use Cases	VU HOANG BAO NGOC			10AM 26/9/2024	<input type="checkbox"/>	<input type="checkbox"/>	
6. Big Data Ethics and Privacy	NGUYEN VINH TUNG LAM			10AM 26/9/2024	<input type="checkbox"/>	<input type="checkbox"/>	
1. Introduction to Connectionist AI	TRUONG NGOC HA			10AM 26/9/2024	<input type="checkbox"/>	<input type="checkbox"/>	
2. Basics of Neural Networks	TRUONG NGOC HA			10AM 26/9/2024	<input type="checkbox"/>	<input type="checkbox"/>	

## TASK DELIVERIES

everyone must take photo during their own process doing the task given

Task Owner	Big Data	Connectionist AI
CEO - 阮天娥	Big Data Technologies	Deep Learning and Advanced concepts
CIO - 吴宝芝	Data processing and analytics	Architectures of neural networks
CTO - 武黄宝玉	Big Data use cases	Ethical Considerations and Challenges
Writer+ Tester - 黄永松林	Introduction to Big Data	Key applications of connectionist AI
Designer - 张玉珂	Big Data ethics and privacy	
	Data analysis and visualization	Introduction to CA Basics of Neural Networks

## WHAT WAS DONE?

- ✦ Get to know each other more
- ✦ Dividing roles and tasks
- ✦ Research the overview of 'Big Data and Connectionist AI'

## WHAT ARE LESSONS LEARNED?

- ✦ Realize the importance of both Big Data and Connectionist AI
- ✦ Deep understanding of each other and our own roles better the working the process
- ✦ Get a rough idea of our module

## WHAT WERE THE ISSUES TO BE RESOLVED?

- ✦ Difficult to understand the new knowledge about the concept of 'Connectionist AI'
- => Search more on Webs and Textbooks

## NEXT STEP

- ✦ Start working on each person's topic
- ✦ Finish each person's personal log



Date: 22/09/2024  
Location: BoHou

\*ready for the meeting

# Date: 25/09/2024

## Location: Meeting Room



### WHAT WAS DONE?

- Finalize our project summary on Big Data and Connectionist AI
- Answer the unsolved questions of each member's tasks
- Get all personal log in one document

### WHAT ARE LESSONS LEARNED?

- Working with team is always the optimal solution
- Should prepare a list of questions wanted to ask
- Should diversify the sources for our research
- Get deeper insights into our module and the practical application of it in real life

### WHAT WERE THE ISSUES TO BE RESOLVED?

- Some misunderstandings happened between some members
- => Always be calm and listen to each other;  
do not let emotion affect you

### NEXT STEP

\*guys, pls don't fight...

- Prepare question and ask teacher in the next class
- Make sure everyone be done with the task delivered



**Date: 27/09/2024**

**Location: Lecture Building**

### **WHAT WAS DONE?**

- ❖ Double check to make sure every task delivered are done
- ❖ Together preparing the project log's presentation: prepare for the content, choose template and finish the final look

### **WHAT ARE LESSONS LEARNED?**

- ❖ Project performance will be higher when the tasks are shared
- ❖ Double check is always needed for a good product
- ❖ Done with all the preparation

### **WHAT WERE THE ISSUES TO BE RESOLVED?**

- ❖ Messed up with the ideas for the log decoration
- => Decided to go for the minimalism style

### **NEXT STEP**

- ❖ Review, reflection and plan for the next project



**Date: 28/09/2024**



**Location: Canteen and 24h**

### **WHAT WAS DONE?**

- ✦ Carefully review before submission
- ✦ Edit all completed tasks for final presentation
- ✦ Run through each person's task as smoothly as possible

### **WHAT ARE LESSONS LEARNED?**

- ✦ Review everything helped us catch little details we might have missed in the rush to finish
- ✦ Rehearsing the presentation helps us feel more confident when giving the actual presentation
- ✦ When everyone contributes to tasks, work efficiency will increase

### **WHAT WERE THE ISSUES TO BE RESOLVED?**

- ✦ The essay still has some mistakes that need to be corrected
  - ✦ When members practice for the presentation but it still doesn't go smoothly
- => Fix mistakes and practice more

**STUDYING**



### **NEXT STEP**

- ✦ Plans for new insights into the module
- ✦ Submit and bonding more

# PROOFS

## SWANIE

**BIG DATA TECHNOLOGIES**

**1. INTRODUCTION**

- What is Big Data Technology?
- Big Data Technology definition
- Large amounts of data designed to analyse, process and extract information.
- Big data technologies have the potential to change the way we live and forever change the way we do business. These technologies disrupt industries.
- Big data technologies refer to a diverse set of tools and framework designed to use data.

**CONNECTIONIST AI: DEEP LEARNING AND ADVANCED CONCEPTS**

**1. Deep Learning**

- Introduction to AI Connectionism
- Connectionism is deeply influenced by cognitive science and computational neuroscience.
- It is a type of machine learning that attempts to model the structure and function of the human brain.
- It is used in various applications such as image recognition, natural language processing, speech recognition, recommendation systems, and robotics.
- During training, connectionist systems learn by adjusting their internal weights to process information in parallel. These networks learn through training data and adjust their weights.

## BAOCHI

**BIG Data**

DATA WISDOM: how to solve ???

Processing      Analytics

Raw data → useable format

Include:

- Data

**OVERVIEW**

Friday, 13/09/2024

**Data Processing and Analytics**

**1. Data Processing**

The first step taken to convert raw data into a useable format. It involves several stages, including data collection, data preparation, data input, data transformation, data output, interpretation and data storage.

**1.1 Data Collection**

Data collection is the first step in the data processing pipeline. It involves gathering data from various sources, such as databases, sensors, logs, and APIs. The data can be structured (e.g., JSON, XML) and unstructured (e.g., text, audio, video).

**Tools for Data Collection:**

- Apache Flume:** A distributed system designed to handle high-throughput and low-latency data streaming, making it ideal for collecting data from multiple sources.
- Apache Nifi:** An open-source tool designed for automating the flow of data between systems. It provides a user-friendly interface for reading, transforming, and processing data.

## DARA

<https://www.institutedata.com/au/big-data-importance/>

This helps mitigate risks and protect businesses and consumers from

**Personalized customer experience**

Big data enables businesses to gain a deeper understanding of their customer data, organizations can personalize the customer experience, campaigns, and offer relevant product recommendations.

This enhances customer satisfaction and improves customer loyalty and retention.

**Practical uses of big data across industries**

Big data is not limited to just one industry. Its applications extend across organizations innovate, improve processes, and drive growth.

Let's explore how big data is being utilized in key industries.

**Big data in healthcare**

When it comes to big data in healthcare, it plays a crucial role in improving patient care, optimizing resource allocation, and enhancing medical research. By analyzing patient data, healthcare providers can identify patterns and correlations, enabling more accurate diagnoses and personalized treatment plans.

**BIG DATA USE CASES**

**A. HOW TO PROCESS BIG DATA**

**1. Data flow intake**

The first stage has data flowing into the system in huge quantities. Data at this stage is unstructured to the core, so it needs to be processed and organized, so as to when you need it, you can find it right away. The most common usage is analysing the past data to find the answer for the present question. The second is to collect and update data in real time to analyze and extract patterns and trends.

Popular strategies include setting criteria that throw out any faulty data or building in-take filters that ignore data that is irrelevant. For example, a ride-share service may find that over 90% of what to do with the findings. For example, a ride-share service may find that over 90% will cancel if the incoming driver is stopped for more than 1 minute.

**2. Data analysis**

Popular strategies include setting criteria that throw out any faulty data or building in-take filters that ignore data that is irrelevant. For example, a ride-share service may find that over 90% will cancel if the incoming driver is stopped for more than 1 minute.

**3. Data-driven decision making**

Interpret the raw findings to form a concrete plan.

**ETHICAL CONSIDERATIONS AND CHALLENGES**

- Bias and Fairness:** Neural networks can inadvertently perpetuate or amplify biases and discrimination, leading to unfair outcomes in areas like hiring, lending, and law enforcement.
- Transparency and Explainability:** The "black box" nature of many connectionist models makes it difficult to understand how decisions are made, complicating accountability and trust.
- Data Privacy:** Training these models often requires large datasets, which can involve collecting personal information, raising concerns about consent and data protection.
- Autonomy and Control:** As AI becomes more advanced, there is concern over whether human oversight and the potential for machines to make decisions without adequate human intervention.
- Job Displacement:** The transformative potential of connectionist AI could lead to significant job losses in certain sectors, necessitating discussions about retraining and economic impact.
- Misinformation:** The ability of AI to generate realistic text, images, and videos can be misused, contributing to the spread of misinformation and eroding trust in media.
- Social Impact:** The integration of AI into daily life can alter social dynamics and relationships, leading to potential isolation or dependency on technology.

# PROOFS

LIAM

The screenshot shows a search result from Intercede Information Technologies. The title is "Symbolic AI vs. Connectionist AI: Unveiling the Fundamental Differences". Below the title, there's a snippet of text: "Big data is often recognized by three characteristics: volume, variety, and velocity, also known as the 'Three V's'. However, there are two additional V's that have emerged over the past few years: value and variety." To the right of the snippet, there's a Microsoft Word document titled "Introduction to Big Data" with the subtitle "Major: Economics and Trade". The document contains several sections and headings, including "What is Big Data? Big Data Defined", "What are the Five 'V's' of Big Data?", and "What are the Three 'V's' of Big Data?".

What is it?

**Data Analysis** is the process of bringing order and structure to collected data. It turns data into information teams can use. Analysis is done to find patterns, trends, and correlations between pieces of data.

**Data visualization** is the process of putting data into a chart, graph, or other visual format that helps inform analysis and interpretation. Data visualizations present the analyzed data in ways that are accessible to and engage different stakeholders. Data visuals are also used to communicate MEAL results to key stakeholders needs. Multiple visuals will likely be needed to understand the longer change process and inform data use. Common data visual formats include:

- Frequency tables
- Cross-tabulation tables
- Bar charts
- Line graphs
- Scatter plots
- Heat Maps
- Scatter graphs.

The document is titled "Data Analysis and Visualization" of the Big Data. It has a section titled "Key Steps in Big Data Analysis" with three numbered steps:

1. **Data Collection**: big data comes from different sources like logs, IoT, social media, etc. the collection of data is the first step in the process.
2. **Data Cleaning and Preparation**: big data is often unstructured or poorly structured, so it needs to be cleaned and prepared before it can be used for analysis. This involves removing values, and ensuring consistency. This transform is in a normal format.
3. **Data Processing and Analysis**: This step is crucial for extracting useful insights from big data.

Below this, there are sections on "Statistical Analytics", "Machine Learning", and "Data Mining". The document concludes with a section titled "Techniques for Big Data Visualization".

HARVIE

DATA VISUALIZATION

**Top 8 Big Data Visualization Tools That You Should Know in 2024**

By Lukesh S

Sep 05, 2024 | 6 Min Read | 5019 Views  
(Last Updated)

The world is driven by data these days. You can almost predict future events if you have the right set of data in your hands. If you are a data scientist, you can easily interpret this data but what about a layman wanting to know about the details of the data? That's where Big Data Visualization comes in.

Big data visualization is the subject that allows you to transform data into a visual representation that can help you visualize the data. Upon hearing this, you now understand that it would be a lifetime task to do so, that's why we will list some of the best big data visualization tools that can help you achieve this much faster.

By the end of this article, you will be equipped with the knowledge of all the big data visualization tools you would need as a data scientist to visualize the data much easier. So, without any delay, let's get started.

# OUTCOMES

- All members completed their tasks seriously and on time.
- Although there were some conflicts and misunderstandings among the members during the work process, they were resolved smoothly. As a result, emotional management and communication skills were improved.
- After research, all members acquired a certain level of comprehensive knowledge about Big Data and Connectionist AI.

### **CEO - SWANIE**

- Demonstrates good work management skills and closely supervises each group member.
- Her meticulousness ensured that all the group's tasks were completed perfectly.
- However, the heavy workload made her become somewhat strict.

### **CIO - BAOCHI**

- Has strong information synthesis skills.
- Possesses good observational skills.
- Her reserved nature makes communication with her a bit challenging.

### **CTO - DARA**

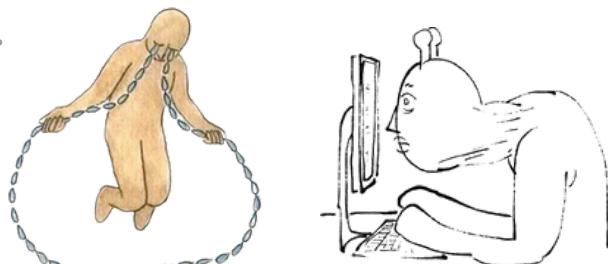
- Quick to grasp information and very responsive.
- Handles tasks efficiently and concisely.
- Still needs to be reminded of tasks occasionally.

### **Writer/Tester - LIAM**

- Perfectionist, always meets deadlines early, which helps the team's progress.
- Comes up with bold and creative ideas. Writer so he is the best with doing research and writing essay
- Works quickly, so some tasks may not be completed as thoroughly as they could be.

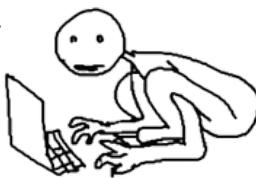
### **Designer - HARVIE**

- Designs slides that are visually stunning and captivating.
- Contributes many great ideas that significantly benefit the group's tasks.
- Her excessive perfectionism led to the inclusion of some unnecessary details in the group's work.



# INTENSIONS

- After completing our project on Big Data and Connectionist AI, we have gained a solid foundation in these emerging technologies. This project allowed us to explore the vast potential of Big Data and how it can be harnessed to drive decision-making, especially when combined with AI models like neural networks. Moving forward, we intend to continue developing our technical expertise, focusing on mastering tools such as Hadoop, Spark, and advanced AI techniques.
- Our next step is to apply this knowledge in practical, real-world scenarios. We are particularly interested in exploring how Big Data can be used to improve predictive analytics and how AI models can be designed to solve complex challenges in fields like healthcare, finance, and technology. By working on hands-on projects, we aim to gain a deeper understanding of the application of these technologies, not just from a theoretical perspective but also in professional contexts.
- Additionally, this project has highlighted the importance of teamwork and collaboration. Throughout the process, we learned how effective communication and coordination are critical to success. In future projects, we plan to apply these lessons by improving how we work as a group, enhancing our ability to collaborate in fast-paced, dynamic environments.
- In conclusion, we are committed to keeping up with the rapid advancements in Big Data and AI. By staying engaged with industry trends, participating in hackathons, and attending relevant workshops, we hope to stay ahead in these fields. Our goal is to continuously refine our skills, preparing ourselves for future opportunities in the growing sectors of AI and data science.



## % CONTRIBUTION AND SCORE

NAME	SCORE
CEO - SWANIE - 阮天娥	100
CIO - BAOCHI - 吴宝芝	100
CTO - DARA - 武黃宝玉	100
WRITER/TESTER - LIAM - 阮永松林	100
DESIGNER - HARVIE - 张玉河	100

-THE END-

\*finally, we are done!

