

Personal Profile: Pete

Full Name: Pete

Age: 26 years old

Current Status: Master's Student in Data Science & AI

University: Asian Institute of Technology (AIT)

Research Interests: Natural Language Processing (NLP), Artificial Intelligence (AI), and Data Science

Previous Education: Bachelor's Degree in Electrical Engineering (Chiang Mai University, 2021)

Work Experience: Former Electrical Engineer (Power Plant, Rayong) – 2 years

Industry Expertise: Energy Sector, Natural Gas Power Generation

Hobbies & Interests: Playing Badminton, Technology & AI Research

I am Pete, I am 26 years old. Born in 1998, I have always had a deep interest in technology, leading me to pursue studies and a career in engineering and AI. Over the years, my academic and professional journey has shaped my passion for problem-solving and innovation.

I am currently pursuing my **Master's degree in Data Science and AI** at the **Asian Institute of Technology (AIT)**. My academic journey started with my **Bachelor's degree in Electrical Engineering** from **Chiang Mai University**, which I successfully completed in **2021**.

My undergraduate studies provided a solid foundation in electrical systems, power generation, and engineering principles. However, my growing interest in AI and data-driven technologies led me to shift my focus toward **data science and artificial intelligence** at the graduate level.

Currently, as part of my master's program, I am studying **Natural Language Processing (NLP)** this semester, exploring how machines can understand and process human language.

During my undergraduate years, I studied a **Bachelor's degree in Electrical Engineering** at **Chiang Mai University**. This program equipped me with in-depth knowledge of **electrical systems, power generation, circuit design, control systems, and energy efficiency**.

For my **Master's degree education**, I pursue major into the field of **Data Science and AI** at AIT, where I am currently deepening my expertise in areas such as **machine learning, deep learning, and NLP**. My interest in AI has grown significantly, and I am particularly fascinated by how artificial intelligence can enhance **automation, predictive analytics, and natural language understanding**.

I have **two years of professional work experience** as an **Electrical Engineer** in the **power generation industry**.

After graduating with my Bachelor's degree in 2021, I worked at a **natural gas power plant** in **Rayong, Thailand**. During my tenure, I was responsible for **monitoring and maintaining electrical**

systems, ensuring power efficiency, and overseeing the safety and operational stability of power generation units.

My experience in the energy sector provided me with hands-on exposure to large-scale industrial operations, energy management, and problem-solving in high-stakes environments.

Now, as I transition into the field of **data science and AI**, I am looking forward to combining my engineering background with AI-driven solutions to optimize power systems and automation technologies.

I have primarily been involved in the **power generation and energy industry**. My work as an **Electrical Engineer** was focused on the **operation and maintenance of a natural gas power plant** in **Rayong, Thailand**.

Key responsibilities included:

Monitoring power plant operations to ensure efficient electricity production

Maintaining electrical systems and equipment to prevent outages or failures

Ensuring energy efficiency and optimizing power generation processes

Collaborating with cross-functional teams to enhance plant performance and safety

Even though my background is in **electrical engineering**, my growing interest in **artificial intelligence, automation, and data science** has led me to transition into the field of **Data Science and AI**. I believe that AI-driven solutions can revolutionize industries like power generation, making them more **sustainable, efficient, and data-driven**.

Currently, I am a **Master's student at AIT**, focusing on **Data Science and AI**, with a specialization in **Natural Language Processing (NLP)** this semester. My primary responsibilities as a student include:

Conducting research on NLP models, machine learning algorithms, and AI applications

Engaging in coursework related to AI, deep learning, and data-driven technologies

Developing machine learning models for various AI-driven projects

Collaborating with professors and peers on academic and research projects

Exploring AI applications in energy systems, industrial automation, and smart technologies

My goal is to bridge the gap between **engineering and AI**, applying **data science methodologies to optimize industrial systems** and improve technological advancements.

I strongly believe that **technology should be developed responsibly and ethically** to create a **positive impact on society**.

Some of my key beliefs include:

Technology should be accessible – AI and data science should be used to improve lives and make knowledge and resources available to everyone.

Ethical AI is crucial – As AI becomes more powerful, we must ensure it remains unbiased, transparent, and ethical.

Sustainability matters – AI and automation can help reduce energy waste, making industries more eco-friendly.

Education is key – The future of technology relies on how well we educate and train future generations in AI and digital skills.

I see AI as a **transformative tool** that, when used correctly, can **improve efficiency, drive innovation, and create new opportunities** while ensuring **fairness and accountability**.

Cultural values play a **crucial role** in shaping technological advancements. Since technology affects all aspects of human life, it should respect and reflect diverse **cultures, traditions, and ethical considerations**.

Inclusivity & Diversity – AI systems should be designed to **understand and respect cultural differences** to avoid biases in language models, facial recognition, and decision-making algorithms.

Human-Centered Design – Technology should prioritize **usability, accessibility, and fairness**, ensuring that people from all backgrounds can benefit.

Ethical Considerations – Different cultures have different perspectives on **privacy, AI ethics, and automation**, so advancements in AI should align with global ethical standards.

By considering **cultural and societal values**, we can develop **technology that serves humanity** in a meaningful way.

One of the biggest challenges I have faced as a Master's student is **balancing research, coursework, and practical projects**.

Managing time effectively – With multiple assignments, research projects, and technical coursework, it requires strong time-management skills.

Keeping up with AI advancements – The field of **AI and Data Science** evolves rapidly, so staying updated with new models, techniques, and technologies is challenging but exciting.

Technical complexity – Some areas, such as **deep learning, NLP, and big data processing**, involve complex mathematical and programming concepts that require deep understanding and practice.

Despite these challenges, I enjoy learning and **exploring new AI techniques** that can be applied in real-world scenarios.

During my Master's program, my primary research focus is on **Natural Language Processing (NLP)** and its applications.

Enhancing AI models to improve text understanding and generation

Applying NLP techniques in real-world industries, such as **energy management, automation,**

and industrial safety

Developing AI-driven insights for better decision-making in complex systems

My ultimate goal is to combine **AI and engineering knowledge** to drive technological advancements and innovation in **AI-driven automation and energy efficiency**.