## **SERVICE GUIDE**

DETAILED INFORMATION ABOUT WHAT WE OFFER



Consultation: 2 hours



**Abstract:** Al-driven drug discovery utilizes artificial intelligence to analyze vast biological and chemical data, enabling the identification of novel drug targets and the development of new drugs with increased speed and efficiency. In Saraburi, Al-driven drug discovery is employed to identify new targets, design and develop drugs, conduct virtual testing, and facilitate marketing efforts. By leveraging Al, researchers can accelerate the drug development process, reducing time and costs while enhancing drug efficacy and safety, ultimately leading to improved patient outcomes.

## Al-Driven Drug Discovery in Saraburi

Artificial intelligence (AI) is rapidly transforming the field of drug discovery. By harnessing the power of AI to analyze vast datasets of biological and chemical information, researchers can identify new drug targets and develop new drugs more quickly and efficiently than ever before.

Saraburi, Thailand, is a hub for Al-driven drug discovery research. Several leading companies in this field are headquartered in Saraburi, leveraging Al to develop innovative treatments for a wide range of diseases, including cancer, Alzheimer's disease, and diabetes.

The potential of Al-driven drug discovery is immense. By accelerating the development of new drugs, Al can bring much-needed treatments to patients faster and more efficiently.

#### Business Applications of Al-Driven Drug Discovery in Saraburi

- **Identifying New Drug Targets:** All can analyze vast datasets to identify potential drug targets, reducing the time and cost of drug development.
- Developing New Drugs: All can assist in designing and developing new drugs, improving their efficacy and safety.
- **Testing New Drugs:** All can simulate drug testing in virtual environments, reducing the time and cost of clinical trials.
- Marketing New Drugs: All can help market new drugs to physicians and patients, increasing adoption and awareness.

Al-driven drug discovery is a game-changer in the pharmaceutical industry. By enabling the rapid development of new and innovative treatments, Al has the potential to improve the lives of countless patients worldwide.

#### **SERVICE NAME**

Al-Driven Drug Discovery in Saraburi

#### **INITIAL COST RANGE**

\$100,000 to \$500,000

#### **FEATURES**

- · Identify new drug targets
- Develop new drugs
- Test new drugs in virtual environments
- Market new drugs to physicians and patients

#### **IMPLEMENTATION TIME**

12-16 weeks

#### **CONSULTATION TIME**

2 hours

#### **DIRECT**

https://aimlprogramming.com/services/aidriven-drug-discovery-in-saraburi/

#### **RELATED SUBSCRIPTIONS**

- Ongoing support license
- · Access to Al team
- Access to AI platform

#### HARDWARE REQUIREMENT

- NVIDIA DGX A100
- Google Cloud TPU v3
- Amazon EC2 P3dn.24xlarge

**Project options** 



### Al-Driven Drug Discovery in Saraburi

Al-driven drug discovery is a rapidly growing field that is revolutionizing the way that new drugs are developed. By using artificial intelligence (Al) to analyze large datasets of biological and chemical information, researchers can identify new drug targets and develop new drugs more quickly and efficiently than ever before.

Saraburi is a city in Thailand that is home to a number of leading Al-driven drug discovery companies. These companies are using Al to develop new drugs for a variety of diseases, including cancer, Alzheimer's disease, and diabetes.

Al-driven drug discovery has the potential to transform the pharmaceutical industry. By making it possible to develop new drugs more quickly and efficiently, Al can help to bring new treatments to patients who need them most.

#### From a business perspective, Al-driven drug discovery in Saraburi can be used for:

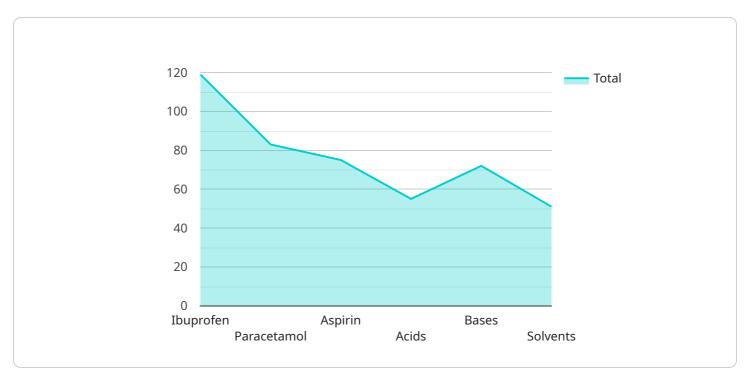
- **Identifying new drug targets:** All can be used to analyze large datasets of biological and chemical information to identify new drug targets. This can help to reduce the time and cost of drug development.
- **Developing new drugs:** All can be used to design and develop new drugs. This can help to improve the efficacy and safety of new drugs.
- **Testing new drugs:** All can be used to test new drugs in virtual environments. This can help to reduce the time and cost of clinical trials.
- Marketing new drugs: All can be used to market new drugs to physicians and patients. This can help to increase the adoption of new drugs.

Al-driven drug discovery is a powerful tool that has the potential to transform the pharmaceutical industry. By making it possible to develop new drugs more quickly and efficiently, Al can help to bring new treatments to patients who need them most.

Project Timeline: 12-16 weeks

## **API Payload Example**

The payload is an endpoint for a service related to Al-driven drug discovery in Saraburi, Thailand.



Al is used to analyze vast datasets of biological and chemical information to identify new drug targets and develop new drugs more quickly and efficiently. Saraburi is a hub for Al-driven drug discovery research, with several leading companies headquartered there. Al can be used to identify new drug targets, develop new drugs, test new drugs in virtual environments, and market new drugs to physicians and patients. Al-driven drug discovery has the potential to improve the lives of countless patients worldwide by enabling the rapid development of new and innovative treatments.

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License insights

## Licensing for Al-Driven Drug Discovery in Saraburi

Our Al-driven drug discovery services in Saraburi require a license to access our proprietary technology and expertise. This license grants you the right to use our Al platform and team to develop and deploy your drug discovery projects.

## **Types of Licenses**

- 1. **Ongoing Support License:** This license includes access to our Al team for ongoing support and maintenance of your drug discovery projects.
- 2. **Access to Al Team:** This license provides access to our team of Al experts who can assist you with project design, data analysis, and model development.
- 3. **Access to Al Platform:** This license grants you access to our proprietary Al platform, which includes a suite of tools and algorithms for drug discovery.

## **Cost and Pricing**

The cost of our licenses varies depending on the specific needs of your project. However, as a general rule of thumb, the cost will range from \$100,000 to \$500,000. This cost includes the cost of hardware, software, support, and the AI team's time.

## **Benefits of Licensing**

- Access to our proprietary Al technology and expertise
- Ongoing support and maintenance from our Al team
- Reduced time and cost of drug development
- Improved efficacy and safety of new drugs
- Increased access to new drugs for patients

## How to Apply for a License

To apply for a license, please contact our sales team at [email protected]. We will be happy to answer any questions you have and provide you with a quote.

Recommended: 3 Pieces

# Hardware Requirements for Al-Driven Drug Discovery in Saraburi

Al-driven drug discovery is a rapidly growing field that is revolutionizing the way that new drugs are developed. By using artificial intelligence (Al) to analyze large datasets of biological and chemical information, researchers can identify new drug targets and develop new drugs more quickly and efficiently than ever before.

The hardware required for Al-driven drug discovery is significant. The following are three of the most popular hardware models available:

- 1. **NVIDIA DGX A100**: The NVIDIA DGX A100 is a powerful AI system that is designed for deep learning and other AI workloads. It features 8 NVIDIA A100 GPUs, 160GB of memory, and 2TB of storage.
- 2. **Google Cloud TPU v3**: The Google Cloud TPU v3 is a powerful AI system that is designed for training and deploying machine learning models. It features 8 TPU cores, 128GB of memory, and 1TB of storage.
- 3. **Amazon EC2 P3dn.24xlarge**: The Amazon EC2 P3dn.24xlarge is a powerful AI system that is designed for deep learning and other AI workloads. It features 8 NVIDIA V100 GPUs, 1TB of memory, and 4TB of storage.

The choice of hardware will depend on the specific needs of the project. However, all of the above models are capable of handling the demanding computational requirements of Al-driven drug discovery.

In addition to hardware, Al-driven drug discovery also requires access to a subscription-based Al platform. This platform provides access to the Al algorithms and tools that are needed to develop and deploy Al-driven drug discovery models.

The cost of Al-driven drug discovery will vary depending on the specific needs of the project. However, as a general rule of thumb, the cost will range from \$100,000 to \$500,000. This cost includes the cost of hardware, software, support, and the Al team's time.



## Frequently Asked Questions:

## What is Al-driven drug discovery?

Al-driven drug discovery is a rapidly growing field that is revolutionizing the way that new drugs are developed. By using artificial intelligence (Al) to analyze large datasets of biological and chemical information, researchers can identify new drug targets and develop new drugs more quickly and efficiently than ever before.

### What are the benefits of Al-driven drug discovery?

Al-driven drug discovery has a number of benefits, including: Reduced time and cost of drug development Improved efficacy and safety of new drugs Reduced risk of clinical trials Increased access to new drugs for patients

## What are the challenges of Al-driven drug discovery?

Al-driven drug discovery faces a number of challenges, including: Data quality and availability Model development and validatio Regulatory approval Cost

## What is the future of Al-driven drug discovery?

Al-driven drug discovery is a rapidly growing field with a bright future. As Al technology continues to develop, we can expect to see even more advances in the field of drug discovery. This will lead to new drugs that are more effective, safer, and more affordable.

The full cycle explained

# Al-Driven Drug Discovery in Saraburi: Timeline and Costs

## **Timeline**

- 1. **Consultation (2 hours):** Discuss project goals and provide an overview of the Al-driven drug discovery process.
- 2. Data collection and preparation: Gather and prepare relevant biological and chemical data.
- 3. **Model development:** Develop and train AI models to identify drug targets and design new drugs.
- 4. Model validation: Test and validate the AI models to ensure accuracy and reliability.
- 5. **Deployment:** Implement the AI models into a production environment for drug discovery.

### Costs

The cost of Al-driven drug discovery in Saraburi varies depending on project requirements. However, as a general guideline, the cost range is:

USD 100,000 - 500,000

This cost includes:

- Hardware
- Software
- Support
- Al team's time

## **Additional Information**

The time to implement Al-driven drug discovery in Saraburi typically takes **12-16 weeks**. This timeline may vary depending on the project's complexity and specific requirements.

For ongoing support and access to AI resources, a **subscription is required**. This subscription includes:

- Ongoing support license
- Access to Al team
- Access to Al platform

Al-driven drug discovery in Saraburi offers numerous benefits, including:

- Reduced time and cost of drug development
- Improved efficacy and safety of new drugs
- Reduced risk of clinical trials
- Increased access to new drugs for patients



## Meet Our Key Players in Project Management

Get to know the experienced leadership driving our project management forward: Sandeep Bharadwaj, a seasoned professional with a rich background in securities trading and technology entrepreneurship, and Stuart Dawsons, our Lead Al Engineer, spearheading innovation in Al solutions. Together, they bring decades of expertise to ensure the success of our projects.



# Stuart Dawsons Lead Al Engineer

Under Stuart Dawsons' leadership, our lead engineer, the company stands as a pioneering force in engineering groundbreaking Al solutions. Stuart brings to the table over a decade of specialized experience in machine learning and advanced Al solutions. His commitment to excellence is evident in our strategic influence across various markets. Navigating global landscapes, our core aim is to deliver inventive Al solutions that drive success internationally. With Stuart's guidance, expertise, and unwavering dedication to engineering excellence, we are well-positioned to continue setting new standards in Al innovation.



## Sandeep Bharadwaj Lead Al Consultant

As our lead AI consultant, Sandeep Bharadwaj brings over 29 years of extensive experience in securities trading and financial services across the UK, India, and Hong Kong. His expertise spans equities, bonds, currencies, and algorithmic trading systems. With leadership roles at DE Shaw, Tradition, and Tower Capital, Sandeep has a proven track record in driving business growth and innovation. His tenure at Tata Consultancy Services and Moody's Analytics further solidifies his proficiency in OTC derivatives and financial analytics. Additionally, as the founder of a technology company specializing in AI, Sandeep is uniquely positioned to guide and empower our team through its journey with our company. Holding an MBA from Manchester Business School and a degree in Mechanical Engineering from Manipal Institute of Technology, Sandeep's strategic insights and technical acumen will be invaluable assets in advancing our AI initiatives.