

MediSmart

Smart Pharmacy Solution



About us :

We are a team of innovators from **Valeh Educational and Cultural Institute** try to developing smart solutions that enhance healthcare experiences.

Our Team:

- . **Yasin Abbasi** –Lead Developer
- . **Ali Rahbari** –Researcher
- . **Kiarash Rashidzadeh Gargari** –Developer
- . **NikaSadat Hosseini** –Developer
- . **Eizadyar Jalali Pour** –Developer

Abstract :

MediSmart is an AI-powered pharmacy platform developed by the innovation team at **Valeh Educational and Cultural Institute**, designed to enhance patient experiences through intelligent healthcare solutions. Our collective expertise drives the development of efficient, scalable, and user-friendly technologies that transform traditional pharmacies into modern, automated healthcare hub

Medication errors remain a global concern, with **millions of preventable incidents reported annually**, as highlighted by the **World Health Organization's 2017 initiative – Medication Without Harm**, which aimed to reduce severe medication-related harm by **50% over five years**.

These errors can occur at any stage—from prescription to delivery—and are often caused by incorrect data entry, Miscommunication and Dosage or drug misinterpretation

They not only jeopardize patient safety but also impose high costs on healthcare systems.

A significant portion of medication errors stems from **prescription misinterpretation**. This may result from Look-alike/sound-alike drug names, Illegible handwriting and Unstandardized abbreviations.



Such misinterpretations can lead to severe side effects, overdoses, or treatment failure. Addressing this issue requires intelligent systems that go beyond manual review.

Recent data from controlled environments shows that **AI-enhanced prescription interpretation systems** can:

- **Reduce error rates by up to 32%**
- **Improve prescription processing time by 41%**

These findings validate the role of smart systems in enhancing safety and operational efficiency.

MediSmartAI is a modular, cloud-based solution built on **Rudi Liem infrastructure**. It integrates artificial intelligence to:

- Enhance prescription accuracy
- Streamline pharmacy workflows
- Perform drug interaction checks
- Support diagnostic tools such as **AI-based skin condition analysis**

Key steps in the MediSmartAI purchase process include:

- Upload Prescription
- AI Prescription Parsing
- Biometric Authentication
- Smart Drug Matching
- Automated Notifications

These features collectively replace error-prone manual processes with a secure, efficient digital alternative.

To improve the **safety**, **accuracy**, and **accessibility** of pharmaceutical services through intelligent automation and digital innovation. To deliver a **modular, AI-driven pharmacy ecosystem** that empowers patients and streamlines pharmacy operations via smart reminders, real-time guidance, and secure decision support.