



AI-ENHANCED TRIAGE

FRAMEWORKS: BRIDGING TECHNOLOGY AND CLINICAL EXPERTISE

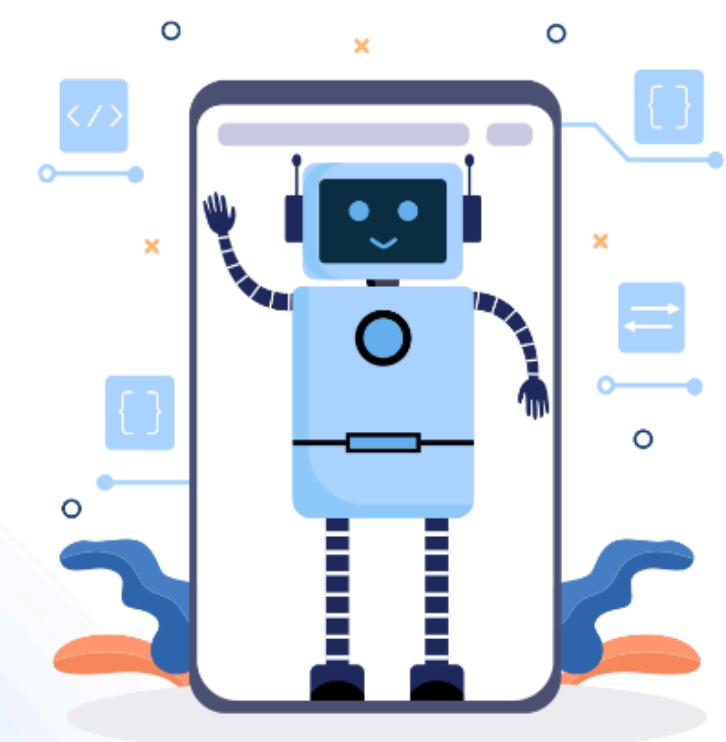
Geru Mădălin, Matei Andreea, Neculai Flavia, Țiploiu Andreea-Larisa, Călin Corciovă

FACULTY OF MEDICAL BIOENGINEERING, „GRIGORE T. POPA” UNIVERSITY OF MEDICINE AND PHARMACY, IASI, ROMANIA



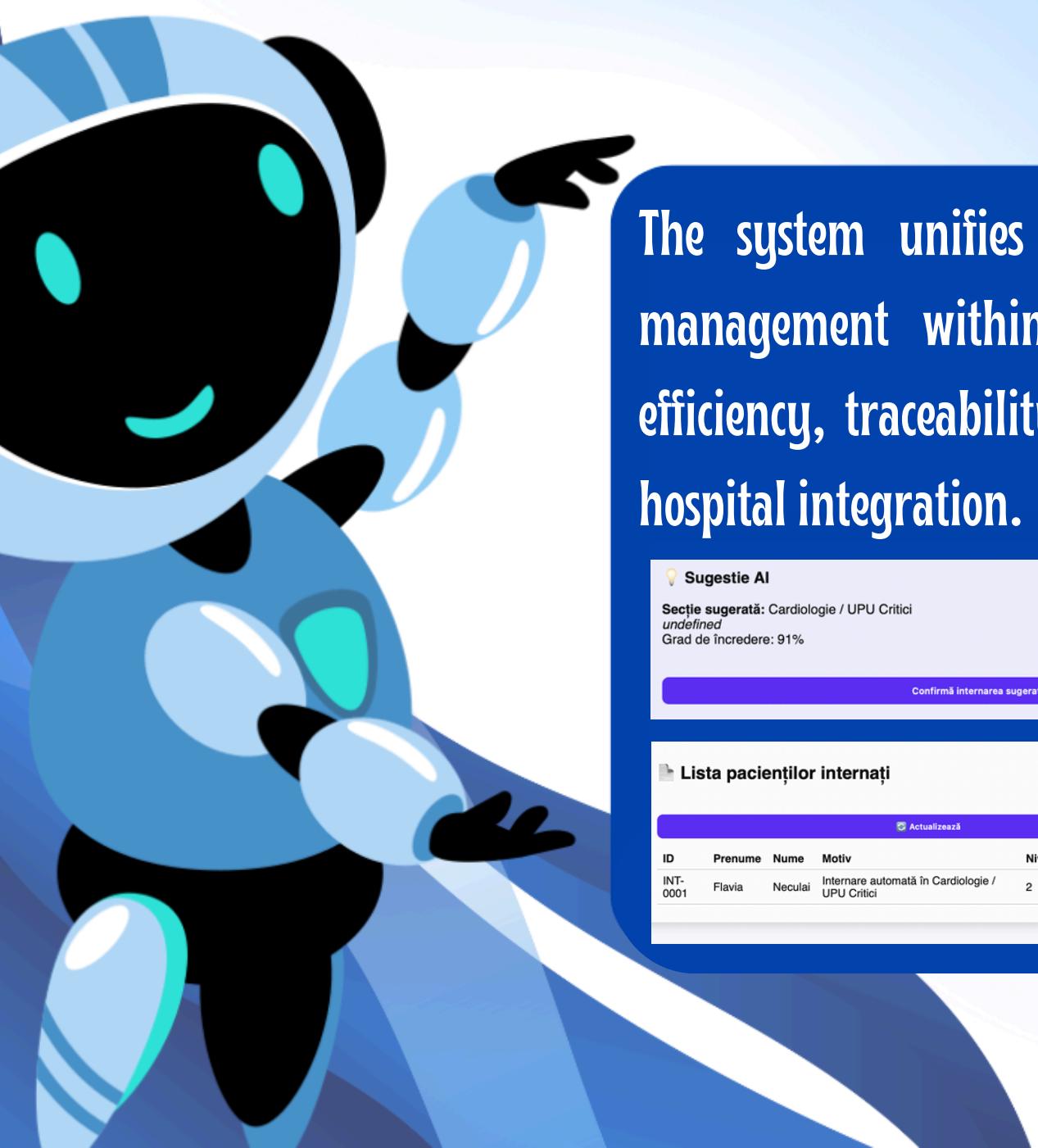
Introduction

Medical triage is a demanding and time-critical process where clinicians must rapidly assess and prioritize patients. In overcrowded emergency units, stress and cognitive fatigue can lead to inconsistent decisions. Integrating artificial intelligence enables faster, safer, and more objective triage through dynamic decision support and real-time patient monitoring.



Materials and Methods

The platform was developed in GitHub Codespaces, a cloud-based environment ensuring reproducible and collaborative development. It uses FastAPI for backend logic and HTML/CSS/JavaScript for the interactive interface, with local JSON storage to manage triage and admission data. It includes an AI-driven ward suggestion module that recommends the most suitable hospital department based on triage level and clinical input.



Results and Conclusions

The system unifies triage evaluation, AI-based ward mapping, and admission management within a single intelligent web platform. This approach improves efficiency, traceability, and decision accuracy, providing a foundation for real-world hospital integration.

Sugestie AI

Secție sugerată: Cardiologie / UPU Critic
Grad de încredere: 91%

Confirmă internarea sugerată

Lista pacienților internați

ID	Prenume	Nume	Motiv	Nivel	Culoare	Tim
INT-0001	Flavia	Neculai	Internare automată în Cardiologie / UPU Critic	2	ORANGE	2025-11-11 10:10:28

Rezultat triaj

Portocaliu (Nivel II - Critic)

○ Timpă scurtă: ≤10 minute

Nivel: 2

Vârstă/Sex: 22 / F

Motive:

- Risc vital moderat

Recomandări:

- Evaluare rapidă
- Analgize
- Monitorizare
- Acces venos

[Continuă la internare](#)

Rezultat triaj

Completează datele și apăsa „Evaluarează pacientul”.
[Continuă la internare](#)

Prenume	Nume	CNP
Vârstă	Sex	TA (mmHg)
ani	—	ex. 120/80
Puls (bpm)	FR (resp/min)	SpO ₂ (%)
80	ex. 16	98
Temp (°C)	GCS	Durere (0-10)
37	3-15	ex. 5
Resurse (0,1,2+)		
0		
Evaluarează pacientul		
Reset		



GRIGORE T. POPA UNIVERSITY OF MEDICINE AND PHARMACY IASI