AI-Powered Sonogram Analysis System (FAST Ai) for Rapid Detection of Internal Bleeding in Trauma Patients

Tech ID: 34597 / UC Case 2020-085-0

TECHNOLOGY DESCRIPTION

UCSF researchers have developed an innovative AI-powered system to enhance Focused Assessment Sonography for Trauma (FAST Ai) in adult trauma care by analyzing abdominal sonograms to detect free fluid, addressing the urgent need for rapid identification of internal bleeding in trauma patients. Utilizing advanced machine learning algorithms, including deep learning models trained on annotated sonograms, the technology automates the identification of anatomical structures and fluid presence with accuracy rates of up to 98%. This system eliminates the dependency on radiologists for point-of-care diagnostics, significantly reducing time to intervention and improving outcomes for patients with life-threatening injuries. With applications spanning emergency care, digital health, and trauma diagnostics, this groundbreaking tool advances precision medicine and real-time clinical decision-making.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	12,340,895	06/24/2025	2020-085
European Patent Office	Published Application			2020-085

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OTHER INFORMATION

KEYWORDS

AI-Powered Trauma Diagnostics, Focused Assessment Sonography for Trauma (FAST) Technology, Internal Bleeding Detection System, Automated Point-of-Care Ultrasound Solutions, Precision Medicine in Emergency Care

CATEGORIZED AS

- **Biotechnology**
  - Bioinformatics
  - Health
- **Medical**
  - Disease: Blood and Lymphatic System
  - Imaging
  - Software

RELATED CASES

2020-085-0

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