

RescueLine AI

AI-Powered Emergency Call Triage System

Saving Lives During Disasters

The Problem

During natural disasters, emergency helplines become **overwhelmed**

- **Call volume spikes** 10-50x normal capacity
- **Long wait times** → delayed response to critical emergencies
- **Human dispatchers** cannot scale instantly
- **Life-threatening cases** may wait behind non-urgent calls

Our Solution

RescueLine AI uses conversational AI to instantly triage every incoming call

1. **AI Voice Agent** answers immediately (zero wait time)
2. **Natural conversation** assesses urgency, location, injuries
3. **Smart routing:**
 - P0/P1 (critical) → Human dispatcher
 - P2/P3 (non-urgent) → Waitlist with safety guidance

Priority System

Priority	Type	Response
P0 	Life-threatening	Human transfer
P1 	Urgent	Human transfer
P2 	Semi-urgent	Waitlist
P3 	Non-urgent	Waitlist

AI makes priority decisions in **under 30 seconds**

Live Dashboard

Real-time command center for emergency dispatchers

- **2-column Kanban board**: Waitlist | Human Agent
- **WebSocket updates**: New calls appear instantly
- **Manual override**: "Assign to Agent" button for waitlist escalation
- **MongoDB change streams**: Zero-latency data synchronization

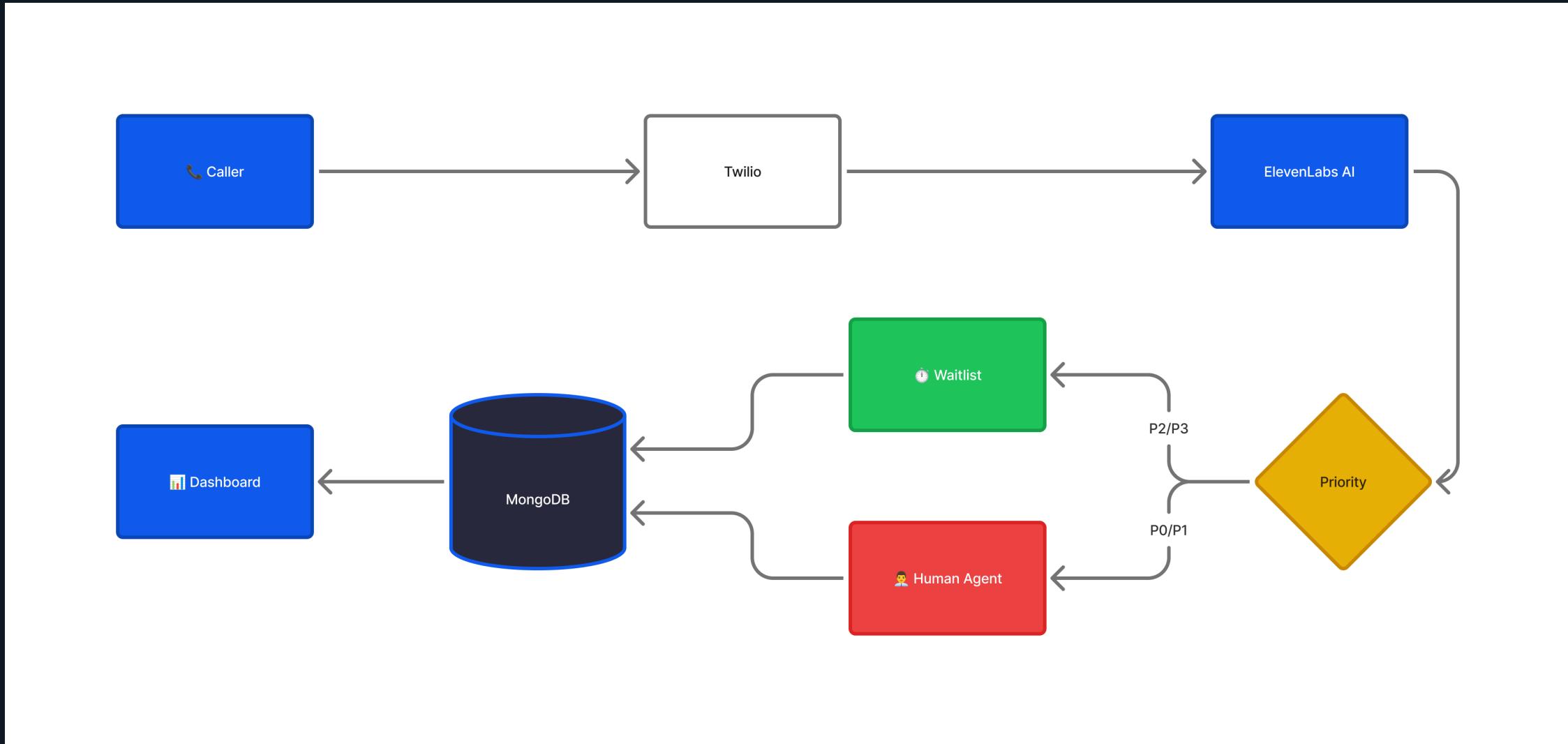
Dashboard Preview

The screenshot displays the RescueLine AI dashboard interface. At the top left is the logo "RescueLine AI". The dashboard is divided into two main sections: "WAITLIST" on the left and "HUMAN AGENT" on the right.

WAITLIST: Contains one item labeled "P2".
- Title: Medical emergency
- Time: 01:00:09
- Number: +12036675094
- Location: Unknown
- Description: "The user reported chest pain, and the agent requested their location."
- Action button: Assign to Agent

HUMAN AGENT: Contains seven items, each with a status indicator (P1, P2, P3, PO) and a timestamp.
1. P1: Police/Security, 07:58:40. Location: Northeastern University. Description: "The user reported being harassed at Northeastern University by someone with a...".
2. P2: Cut on hand, 01:58:49. Location: 20 Washington Street. Description: "The user reported a cut on their hand at 20 Washington Street with non-heavy...".
3. P3: Minor Injury, 01:47:01. Location: 26 Gould Street. Description: "The user reported a minor cut at 26 Gould Street. Due to high call volume, the agen...".
4. PO: Robbery in progress, 01:46:01. Location: 2593 Washington Street. Description: "The user reported a robbery at 2593 Washington Street. The agent classified i...".
5. PO: cardiac arrest, 01:45:21. Location: 9 Mount Pleasant Avenue. Description: (partially visible).
6. PO: Medical Emergency, 01:40:34. Location: 2593 Washington Street. Description: (partially visible).

System Architecture



Tech Stack

Frontend

- React + Tailwind CSS
- WebSocket for real-time updates

Backend

- Node.js/Express + MongoDB Atlas
- MongoDB change streams for instant updates

AI/Voice

- ElevenLabs conversational AI
- Twilio telephony

Key Features

-  **Zero wait time** - AI answers instantly
-  **Accurate triage** - Natural language understanding
-  **Scales infinitely** - AI handles unlimited concurrent calls
-  **Real-time dashboard** - Dispatchers see everything live
-  **Manual control** - Override AI decisions when needed
-  **Persistent data** - All calls logged in MongoDB

Impact

During a disaster affecting 10,000 people:

- Traditional system: 9,900+ people waiting
- RescueLine AI: **0 people waiting**

Only critical cases (P0/P1) reach human dispatchers

All non-critical cases managed by AI with safety guidance

Demo

Live Dashboard

- Cards update in real-time as calls come in
- Manual assignment moves calls between columns
- Priority-based color coding (red/orange/yellow/green)
- Full call details: location, summary, timestamp

Try it: Call the demo number to see AI triage in action

Thank You

