

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

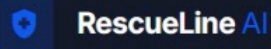
AI makes priority decisions in **under 30 seconds**

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



● WAITLIST

1

P201:00:09

Medical emergency

+12036675094

Unknown

"The user reported chest pain, and the agent requested their location. "

Assign to Agent

● HUMAN AGENT

7

P107:58:40

Police/Security

+12036675094

Northeastern University

"The user reported being harassed at Northeastern University by someone with a...

P301:47:01

Minor Injury

+12036675094

26 Gould Street

"The user reported a minor cut at 26 Gould Street. Due to high call volume, the agen...

P001:45:21

cardiac arrest

+12036675094

9 Mount Pleasant Avenue.

P201:58:49

Cut on hand

+12036675094

20 Washington Street

"The user reported a cut on their hand at 20 Washington Street with non-heavy...

P001:46:01

Robbery in progress

+12036675094

2593 Washington Street

"The user reported a robbery at 2593 Washington Street. The agent classified i...

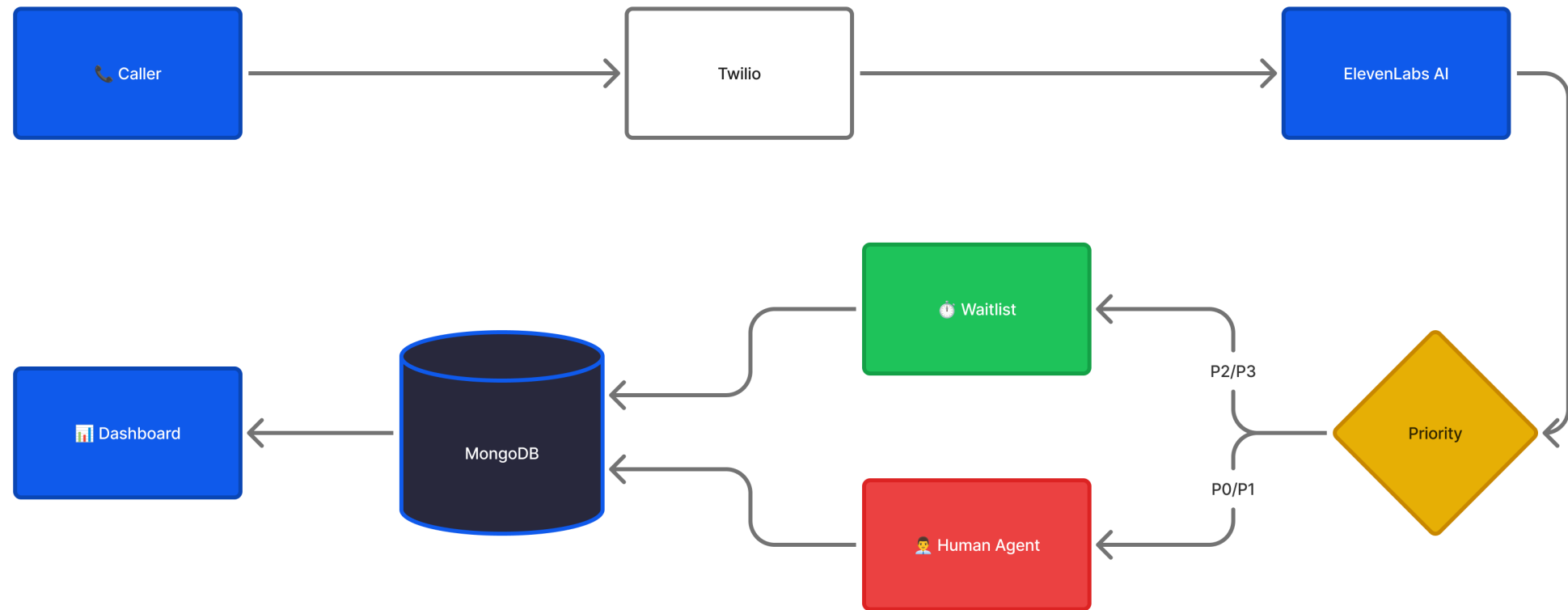
P001:40:34

Medical Emergency

+12036675094

2593 Washington Street

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

