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

🛡️ **RescueLine** AI

● **AI AGENT ANALYSIS** — 2

P0 — 14:24:02
Unresponsive Adult
+1 (555) 911-0001
📍 Calculating loc...

"Subject not breathing, colla…"

P1 — 14:23:15
Structure Fire
+1 (555) 019-2834
📍 Near 200 Block, Residential Area

"Smoke visible from second st…"

● **WAITLIST** — 3

P2 — 14:18:00
Traffic Accident
+1 (555) 882-1920
📍 Hwy 101 SB, Exit 42

"Minor collision, two vehic…"

P2 — 14:12:45
Suspicious Activity
+1 (555) 334-9090
📍 2200 Block, 5th Ave

"Individual looking into pa…"

P3 — 14:05:20
Noise Complaint
+1 (555) 771-3321
📍 889 Oak Ln

● **HUMAN AGENT** — 2

P0 — 14:22:10
Cardiac Arrest
+1 (555) 998-2121
📍 123 Main St, Apt 4B

"CPR in progress by family memb…"

P1 — 14:20:05
Domestic Disturbance
+1 (555) 442-1002
📍 404 Pine St

"Verbal escalation reported b…"

🕐 **COMPLETED**

P2 — ✓ 14:00:01
False Alarm
+1 (555) 231-5500
📍 1590 Wilson Blvd

"Caller confirmed accidental …"

P3 — ✓ 13:45:12
Minor Theft
+1 (555) 009-1234
📍 Mall Plaza, Sector 4

"Report filed for stolen bicy…"
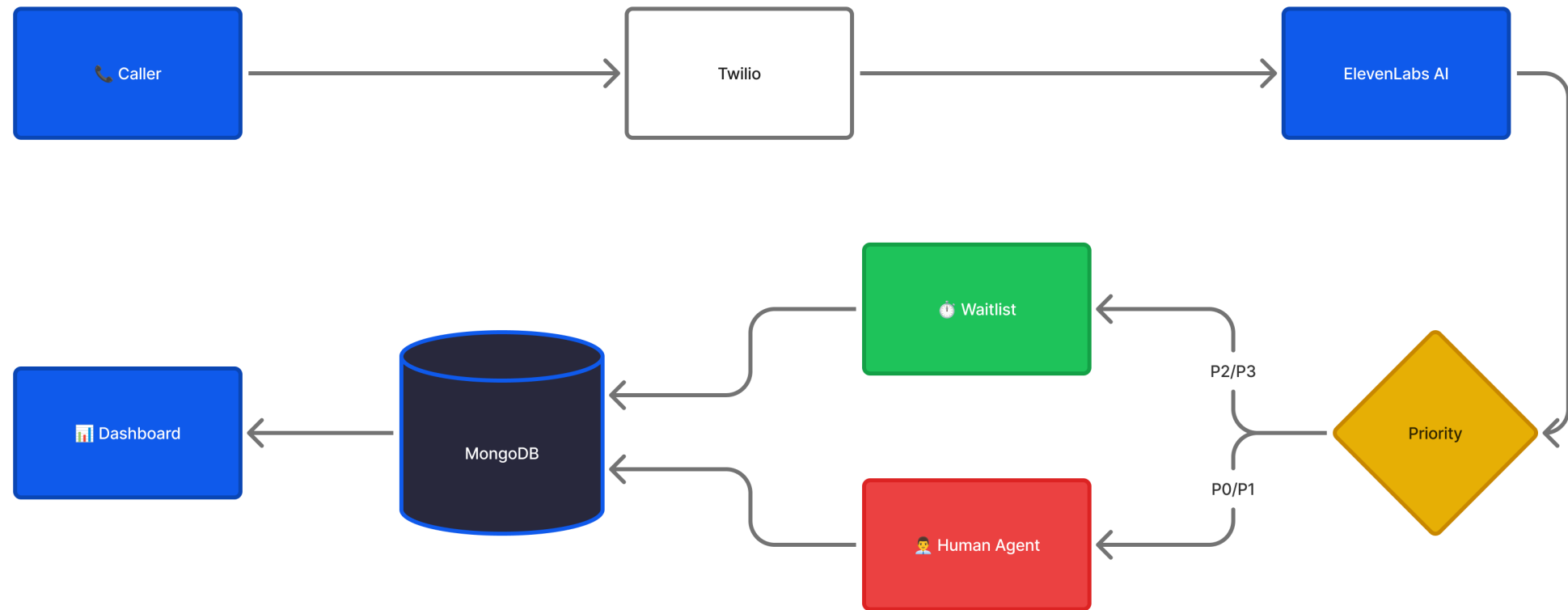
P3 — ✓ 13:10:00
Cat in Tree
+1 (555) 778-9900
📍 21 Park Ave

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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