

#### Al Crowd Managment System

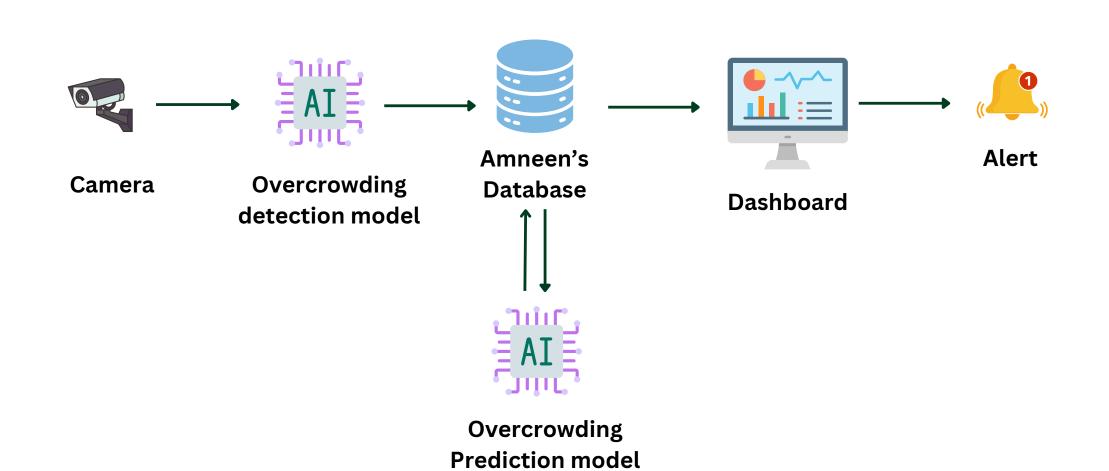
Dareen Alsulami Amal Aljadani Njoud Alahmadi Supervisor: Dr. Rsha Mirza

### Problem

High-density crowd incidents highlight the risks of unmanaged gatherings. Traditional methods like manual observation and standard surveillance often fall short in real-time control. A smarter and more efficient solution is needed to detect and analyze crowds, helping to prevent overcrowding.

# Proposed Solution

## What Is Amneen



- Amneen is a desktop application that uses AI, Computer Vision, and Deep Learning to control overcrowding in real-time.
- It provides early warnings to people in charge and offers a dashboard to monitor crowds.

## Tools









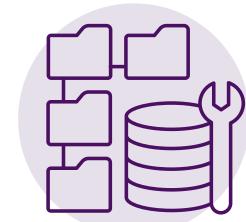






Detect

overcrowding in real-time



**Predict** 

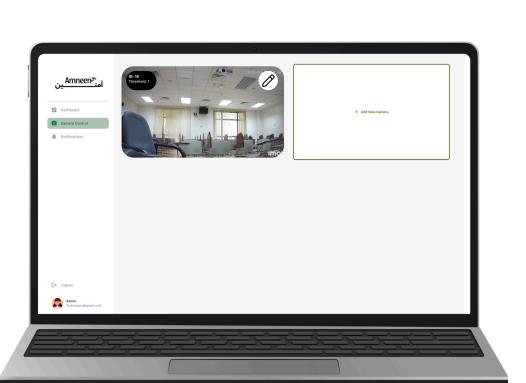
overcrowding in public spaces



Provide

early warnings to help prevent incidents.

| آمن <sup>®</sup> Amneenین |   |
|---------------------------|---|
| Dashboard                 |   |
| Camera Control            | Crowd Density Over Time  Filter by date: 2023-01-01   |
| Notifications             | Camera 1 ▼  |
|                           | 194   |
|                           | 155   |
|                           | 100   |
|                           | Threshold: 100  |
|                           |   |
|                           |   |
|                           | 38 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
|                           |   |
|                           | <sup>0</sup> 12am 1am 2am 3am 4am 5am 6am 7am 8am 9am 10am 11am 12pm 1pm 2pm 3pm 4pm 5pm 6pm 7pm 8pm 9pm 10pm 11pm 11pm |
|                           |   |
|                           |   |
| [→ Logout                 |   |
| Admin                     |   |
| dis-                      |   |



| آمن <sup>®</sup> Amneenين     | Time                      | Camera ID |          | Туре                               | People count |
|-------------------------------|---------------------------|-----------|----------|------------------------------------|--------------|
| Dashboard                     | May 1 2025<br>07:42:12 PM | ID #16    | <u> </u> | Overcrowding Prediction<br>Warning | 2            |
| Camera Control  Notifications | May 1 2025<br>06:59:38 PM | ID #16    | <b>A</b> | Overcrowding Warning               | 1            |
|                               | May 1 2025<br>06:57:38 PM | ID #16    | <b>A</b> | Overcrowding Warning               | 1            |
|                               | May 1 2025<br>06:55:38 PM | ID #16    | <b>A</b> | Overcrowding Warning               | 1            |
|                               | May 1 2025<br>06:49:38 PM | ID #16    | <b>A</b> | Overcrowding Warning               | 1            |
|                               | May 1 2025<br>06:47:38 PM | ID #16    | <b>A</b> | Overcrowding Warning               | 1            |
|                               | May 1 2025<br>06:45:38 PM | ID #16    | <b>A</b> | Overcrowding Warning               | 1            |
|                               | May 1 2025<br>06:43:38 PM | ID #16    | <u> </u> | Overcrowding Warning               | 1            |
| 5                             | May 1 2025<br>06:41:38 PM | ID #16    | <b>A</b> | Overcrowding Warning               | 1            |
| Admin TryAmnenn@gmail.com     | May 1 2025<br>06-37-38 PM | ID #16    | <b>A</b> | Overcrowding Warning               | 1            |
| is promounting finally.com    |                           |           |          |                                    |              |