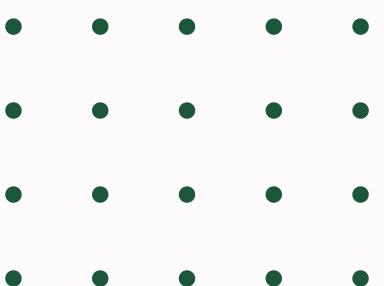


SOS Predict

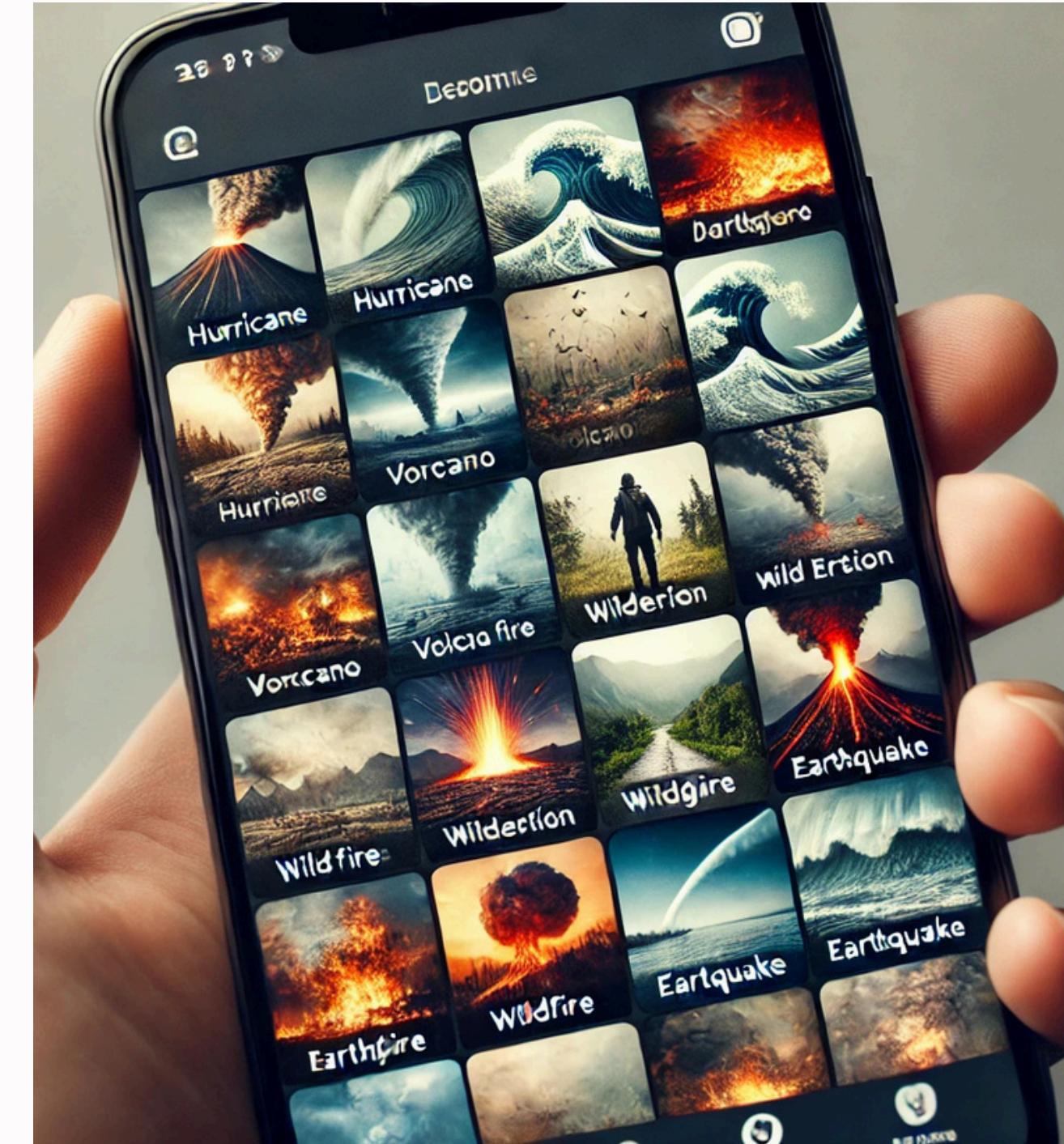
HackHolyoke 2024

DISASTER-READY COMMUNITY: AI-POWERED DISASTER RISK ASSESSMENT AND PREDICTION



Content

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Overview



01



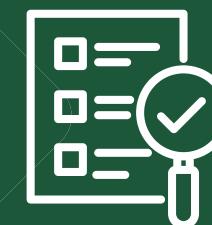
Each year, the United States faces a wide range of natural disasters—destructive hurricanes, seasonal tornadoes, and intense wildfires.

FEMA plays a critical role in disaster management, supporting people throughout these events via coordinated response efforts and relief funding.



02

03



Our platform will leverage this essential framework, providing regularly updated data and insights to empower proactive disaster response and resource allocation.

This solution aims to strengthen resilience, minimize damages, and accelerate recovery for impacted communities.



04

Objectives

Objective 01

To provide users with an interactive map (with US for demo-version) of disasters



Objective 02

To educate people about what disasters are prevalent in different regions

Objective 03

To warn people about upcoming disaster for harm reduction

Objective 04

To provide historical context of natural disaster's



Target Audience

Target Audience #1



Citizens who want to be aware of upcoming disasters and be prepared.

Target Audience #2



Government who wants to reduce the humanitarian and financial burden that disasters bring.

Target Audience #3



Business owners who wish to protect their businesses.



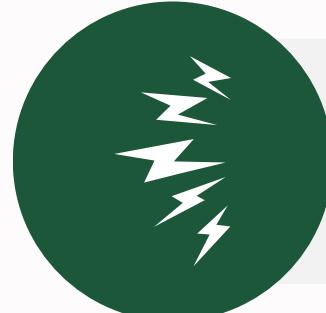
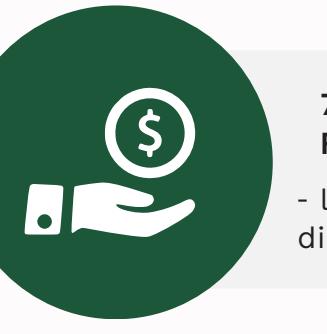
USER INTERFACE



Types of Interactive Maps

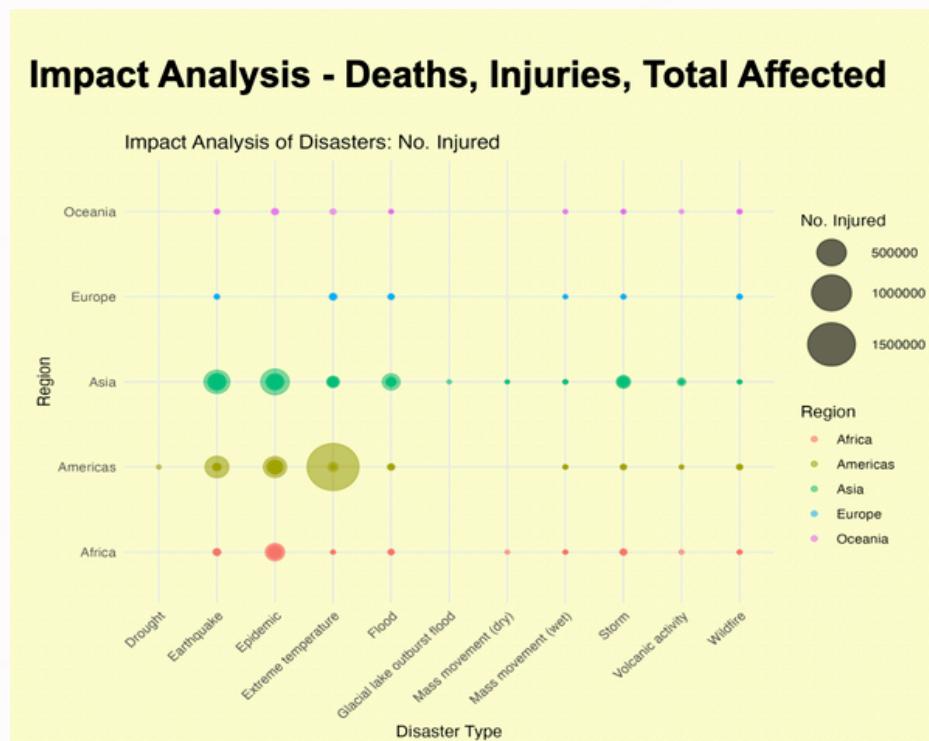
that web-app will have



-  1. Interactive worldwide map (by disaster type)
- interactive map, frequency by region, filter by type
-  2. Impact analyses: Deaths, Injuries, and Total Affected
- stacked bar chart or grouped bar chart
-  3. Economic Damage by Disaster Type and Region.
- heatmap, by disaster type and region.
-  4. Disaster Duration Analysis
- box plot or histogram of duration for each type.
-  5. Magnitude and Human Impact
- scatter plot of magnitude vs. total affected (for death) for types
-  6. Disaster response effectiveness
- bar chart of total deaths, injuries, affected people of or out
-  7. Trend in Aid and Reconstruction Cost
- line chart broken down by disaster type

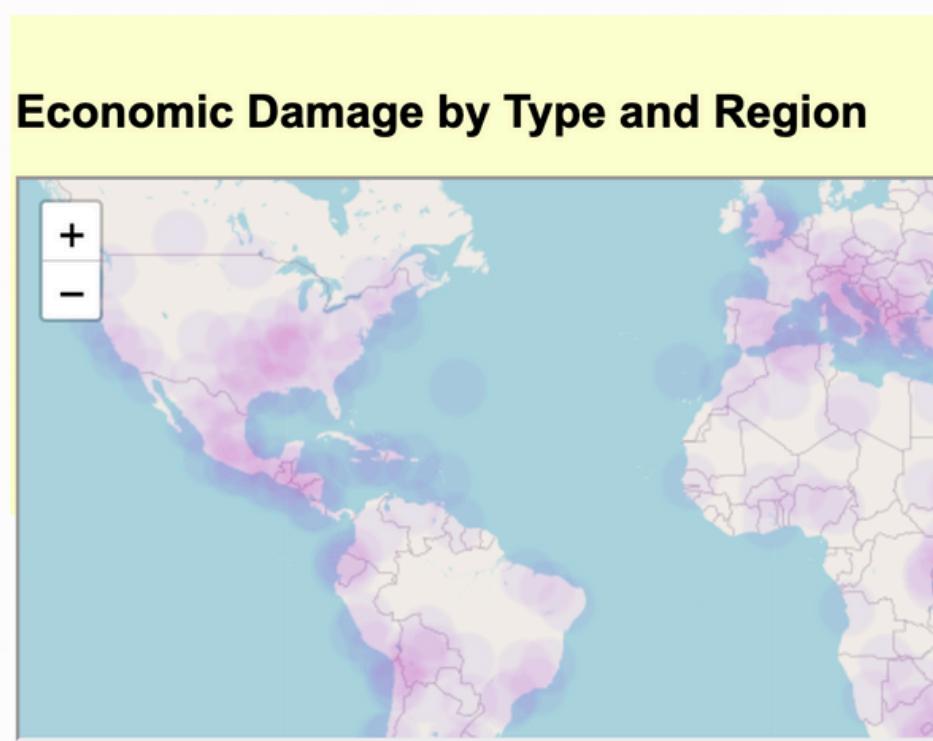
Interactive maps

Diagram #1



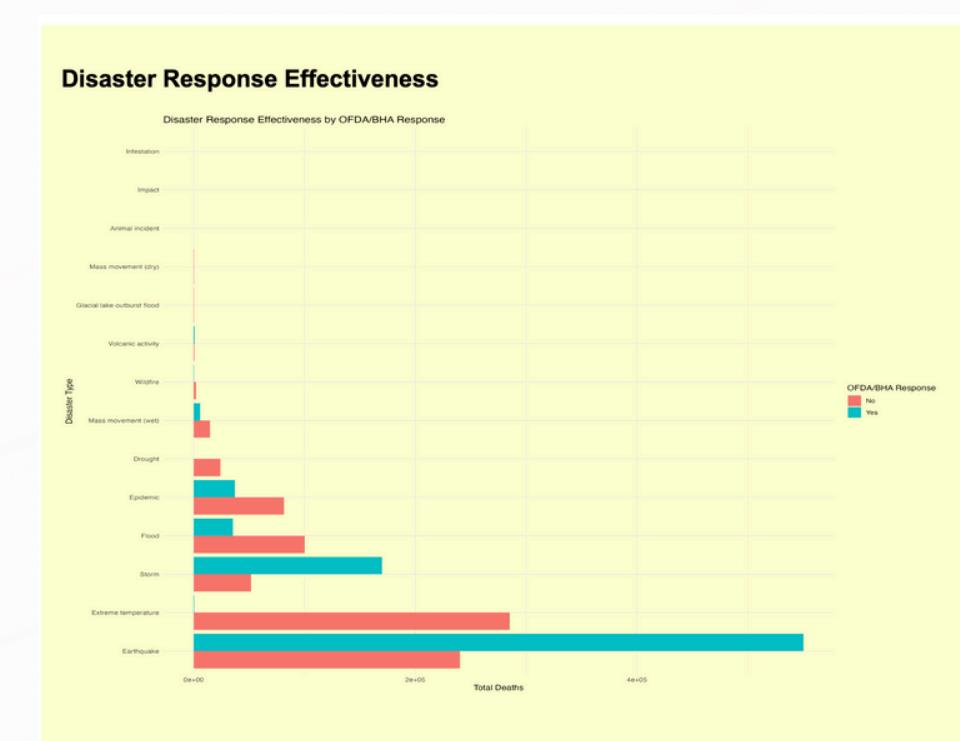
Casualties analysis

Diagram #2



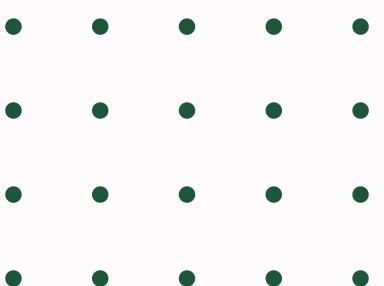
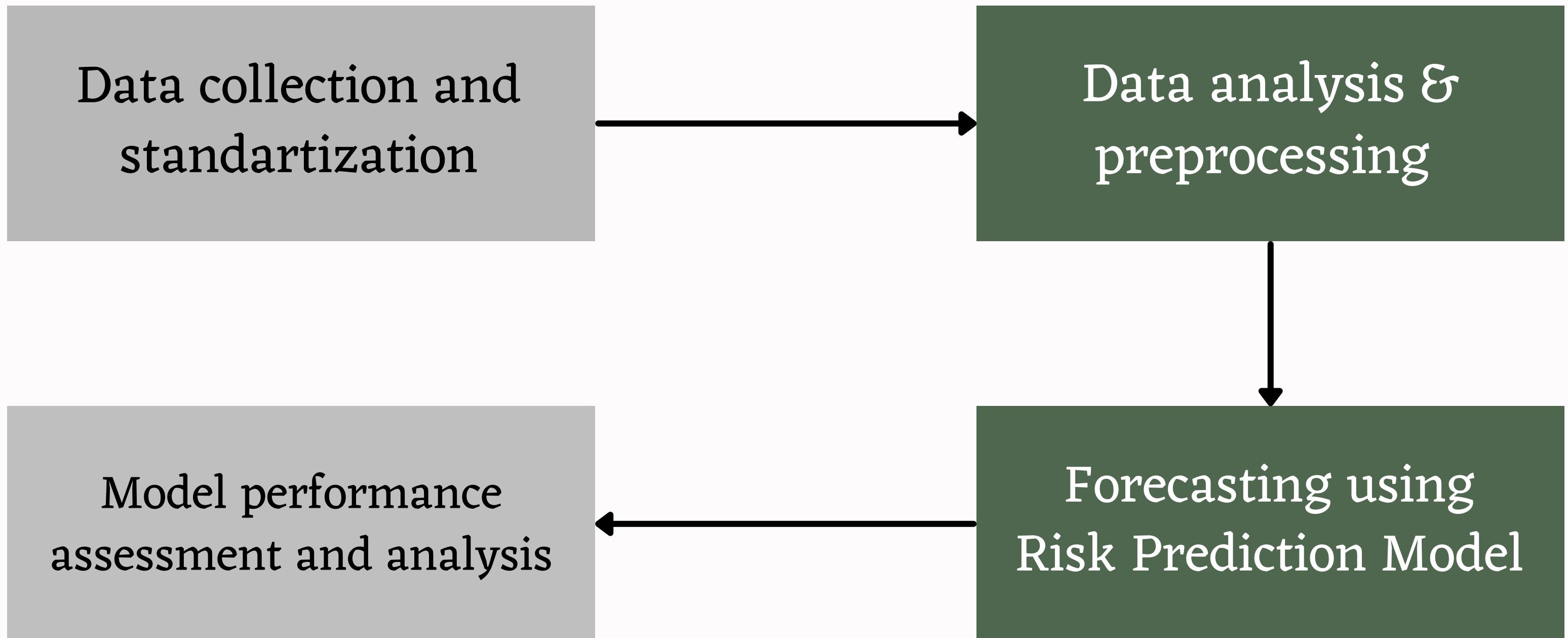
Economic Damage

Diagram #3



Disaster response effectiveness

AI powered system

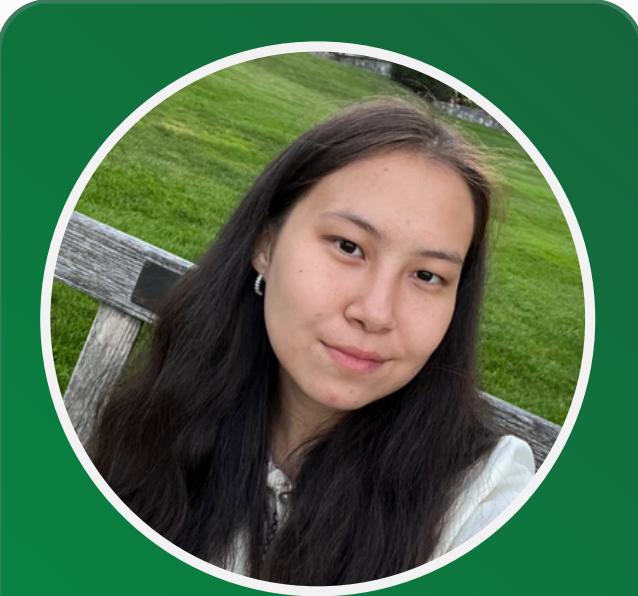


Our Team



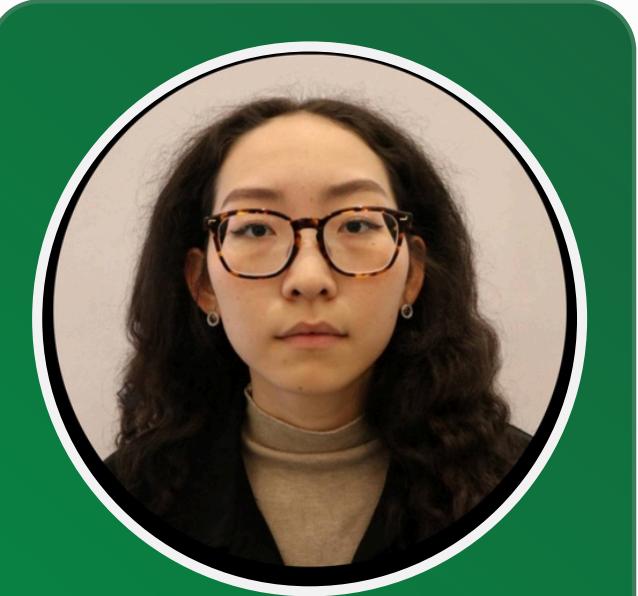
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Nargiz
Akhmetova

AI & System
Engineer



Malika
Kopbayeva

Design and
Pitch



**THANK YOU FOR YOUR
ATTENTION!**