



Visual Intelligence

A Goal Towards Prevention and A Cure

Introductions

Our Team



Pictured left to right: Brian Bates, Kevin Busseno, Norsang Nyandak, Alianna Panganiban, Stephanie McCarten

Our Sponsor



Jacques J. Ohayon Ph.D, Visual Intelligence LLC

01
Problem
Identification

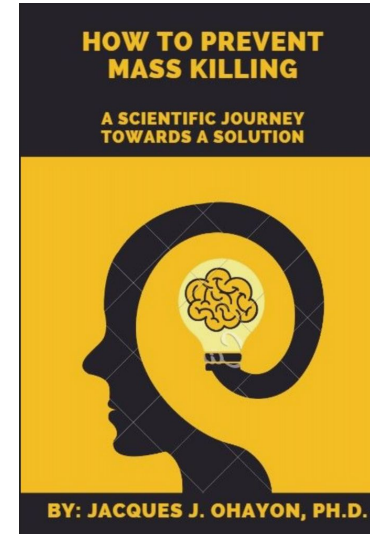
The background features several decorative geometric shapes in the corners. In the top-left, there is a purple-to-blue gradient octagon. In the top-right, a blue-to-purple gradient octagon. In the bottom-left, a grey octagon with a purple-to-blue gradient border and a radial pattern of thin purple lines. In the bottom-right, a grey octagon with a purple-to-blue gradient border and a radial pattern of thin purple lines.

The Problem

As a team we had to consider the needs of our sponsor Jacques Ohayon and what he was hoping to accomplish this semester through the Capstone Program.

He has worked tirelessly in his research of biomarkers in the pupil and their correlation with perpetration of mass casualty events and violent behavior. He details his findings in his book "How to Prevent Mass Killing".

While he aims to continue spreading the word of his work in this field, he has also recently pivoted into research in the use of machine learning and AI in the diagnostic and drug discovery field, and how to ensure it is being used in an ethical fashion.



Initially Proposed Solutions

Data Analysis and Visualization

Our initial Idea for moving forward was to analyse existing machine learning models in the medical field.

We would use data about their feature engineering, data sources, populations, and models in order to identify trends and present our findings using data visualization tools.

We ultimately did not pursue this route because it did not encapsulate all of the information and changes we were asked to address.

Creating a New Website

Another Idea we considered was creating an entirely new website to display the research we were doing and advertise our sponsor's book on.

However we did not pursue this route because it did not make financial sense to our sponsor to host and maintain a third website. A better solution was to build on the existing website that already had some shared focus with our goals.

02
Team
Solution

The background features several decorative geometric shapes in the corners. In the top-left, there is a purple-to-blue gradient octagon. In the top-right, a blue-to-purple gradient octagon. In the bottom-left, a grey octagon with a purple-to-blue gradient border and a radial pattern of thin purple lines. In the bottom-right, a grey octagon with a purple-to-blue gradient border and a radial pattern of thin purple lines.

Our Solution

The solution we decided to pursue was to work with our sponsor's existing website: <https://visualintelligence.us/>

Since the two major requirements of our project were to research the ethics of AI in the medical industry and promotion of our sponsor's book, most of the changes we made to the site focused on achieving those goals.

In regards to promotion of the book, we added information about the book, a functionality to purchase and download the book on the site, a review system, and a page dedicated to highlighting important references used in the book.

Furthermore, to aid in promotion and community outreach, we implemented constant contact for our Sponsor, and added the ability to subscribe to it on the newly updated contact us page. We also implemented a chatbot and FAQ system in order to allow people to have their questions answered quickly and easily.

We also conducted research on the ethical usage of AI in the medical industry and drug discovery field. We studied multiple papers on different machine learning models used in the industry and identified what worked, what didn't, and came up with recommendations and a standardization which has all been reported on a new page on the site, along with our references.

Lastly we also made some quality improvements to the site. For example, we removed any non functioning links and buttons, consolidated the navigation bar, and fixed other minor issues.

03

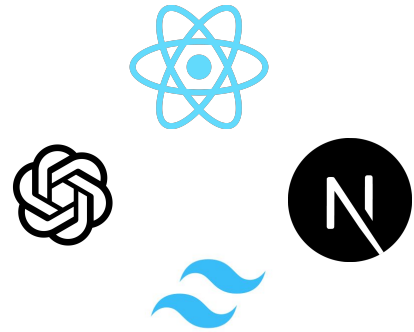
**Resources &
Tools**



Wordpress.org



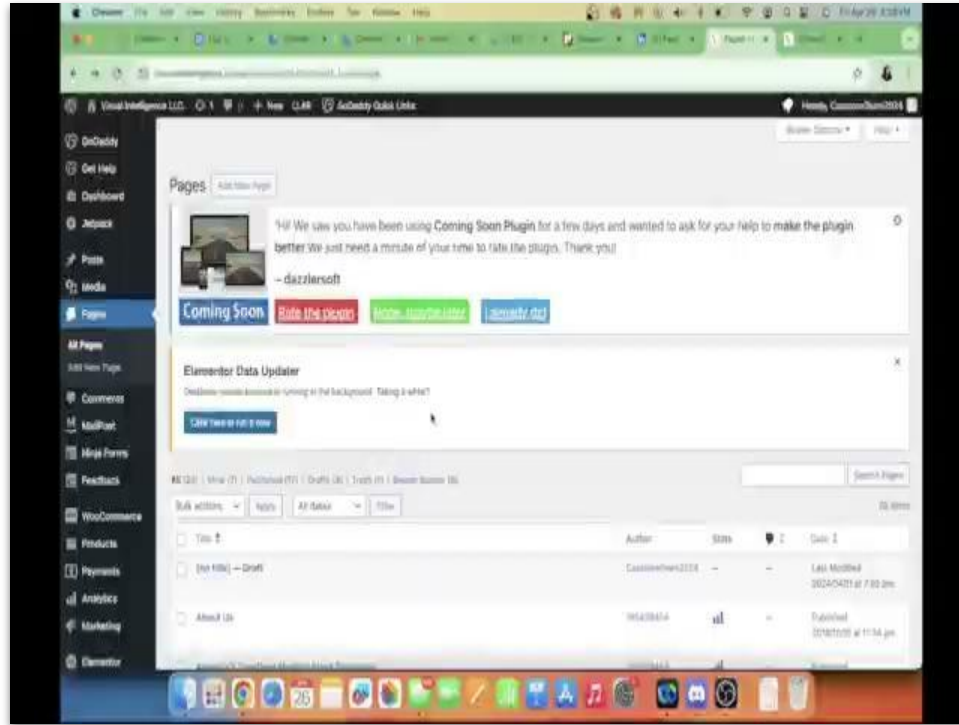
CSS



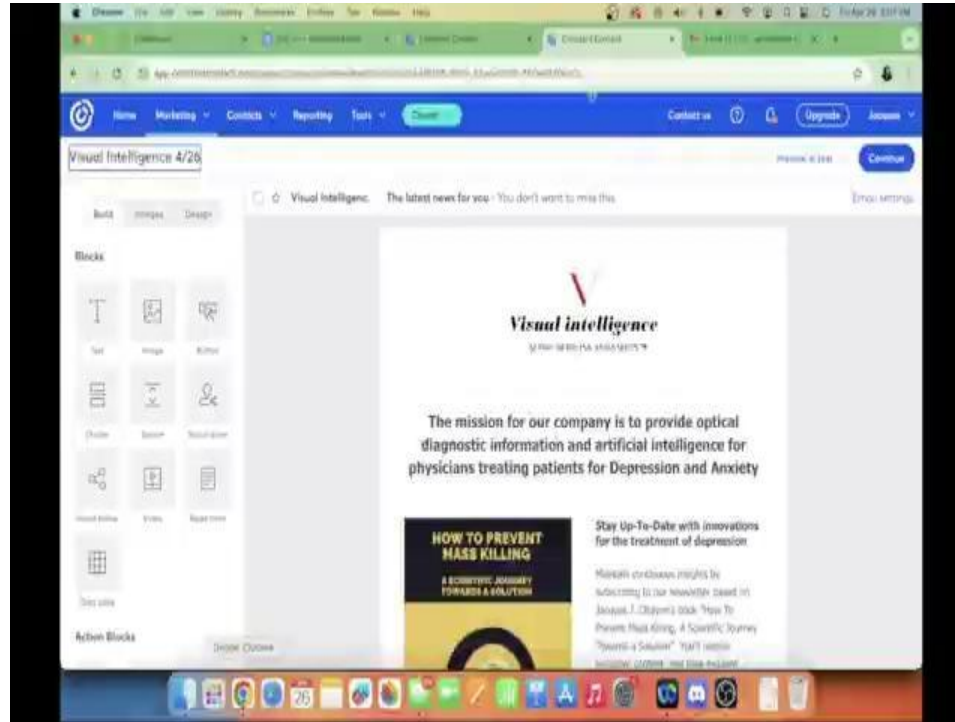
Chatbot built
with:
React
Next.js
OpenAI sdk
Tailwind CSS

04 Demo

Contact Us



Newsletter



E-Commerce



Medical AI

Visual Intelligence LLC.
Artificial Intelligence for Medicine and Safety

Home Services Pupil Distortions Book Medical AI Checkout Cart \$0.00 0 items

Ethical AI Template and Recommendations

Medical ML Model Template and rules :

- Why was this ML model made?** Why was it necessary to create this model? What does it provide that we do not already have?
- What techniques were used to create this model?** Is this model made with Support Vector Machines, Logistic Regression, Decision Tree, Random Forest, Gradient Boosting, or something else? What is this specific method being used? How does this model address fairness, explainability, and bias?
- How many people were in the study?** How big was this dataset? How does it compare to datasets of other models? Is this dataset still growing? Is the training and testing split 80-20 or a different metric?

Landing Page & AI Assistant

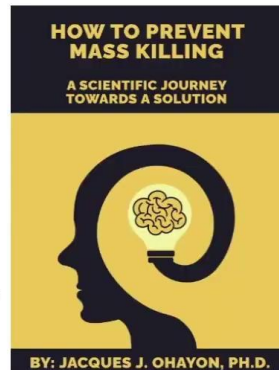


Empowering Humans with Visual Intelligence LLC.

The mission for our company is to provide *optical diagnostic* and *artificial intelligence* for physical treating patients for Depression and Anxiety

[Chat With AI](#)





Book Overview

This book, authored by Jacques J. Ohayon, Ph.D., explores the phenomenon of mass killings, focusing on incidents since the 1999 Columbine massacre where perpetrators were either apprehended or committed suicide. Ohayon's findings suggest a significant link between mass killers and psychiatric care, with many being patients undergoing treatment, some experiencing treatment-resistant depression. The book highlights a potential connection between psychiatric medications and mass killings, a topic seldom discussed despite evidence suggesting medication side effects could contribute to such incidents. Through detailed analysis, "How to Prevent Mass Shooting" delves into the role of mental health treatment and medication in mass killings, raising questions about the FDA's role and the impact of the pandemic on this issue.

[Read Now](#)

Questions

The background features several decorative geometric shapes. In the top left, there are purple and blue polygons. In the top right, a blue and purple polygon is visible. On the right side, a large grey polygon is partially shown. In the bottom left, a grey polygon contains a purple radial pattern of lines. In the bottom right, a grey polygon is partially visible with a blue dashed line curving around its edge.

The background features several decorative geometric shapes. In the top left, there is a purple-to-blue gradient polygon. In the top right, a blue-to-purple gradient polygon is visible. On the right side, a grey polygon is partially shown. In the bottom left, a grey polygon contains a purple-to-blue radial gradient pattern. In the bottom right, a grey polygon is partially visible with a blue dashed line along its edge. The text "Thank You!" is centered in a large, bold, black font.

**Thank
You!**