



Visual Intelligence LLC

A Goal Towards Prevention and A Cure

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Chapter 1: Introduction

1.1 Project Background

Visual Intelligence LLC. is a company based in the NJIT VentureLink who provides optical diagnostic information and artificial intelligence for physicians treating patients for Depression and Anxiety. Visual Intelligence is the developer of the Opto-Screen 2 application that provides user methods to filter and study images of the iris and the pupil. The purpose of this is to analyze the biomarkers associated with mental health conditions that lead to mass killings and suicides. Diagnostics can be pupil distortions and variations of the structure in the retina of patients taking anti-depressants medication. The company has committed their work to preventing violence with individuals and communities. They prioritize supporting healthcare experts, law enforcement officials, and anti-terrorism professionals to offer technology solutions and consulting services.

This project is aimed to seek the use of Artificial Intelligence and Machine Learning to best communicate the discovery regarding the treatment for mental health issues. We would also establish standards for Artificial Intelligence and Machine Learning ensuring that the industries consistently prioritize the goals of mental disease prevention. By updating the online appearance of the visualintelligence.us website, the company is able to showcase their services and implementation of ethical standards to an audience of users.

1.2 Problem Definition

With the significant technological advancements of Artificial Intelligence and Machine Learning, it is crucial to identify the risks associated with these tools and direct it toward

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benefiting society. The existing visualintelligence.us website lacks modern design elements and fails to effectively communicate to target audience and clients about the commitment to creating a safer world. This makes it difficult to navigate through the site and limits the functionality for users who visit it.

1.3 Glossary of Terms Used

Artificial Intelligence: computer systems that mimic human intelligence in order to perform tasks.

Machine Learning: a branch of artificial intelligence which is used to enable AI to imitate the ways humans learn, and gradually improving its accuracy.

True Positive (TP): This is an outcome where the model correctly predicts the positive class.

False Positive (FP): Also known as a Type I error, this is an outcome where the model incorrectly predicts the positive class.

True Negative (TN): This is an outcome where the model correctly predicts the negative class.

False Negative (FN): Also known as a Type II error, this is an outcome where the model incorrectly predicts the negative class.

Confusion Matrix: This is used to organize and display the TP, FP, TN, and FT. This is a 2x2 grid with TP on the top left, FP on the top right, FN on the bottom right, and TF on the bottom left.

Accuracy: This is the proportion of true results (both true positives and true negatives) among the total number of cases examined. It's calculated as:

$$\text{Accuracy} = (\text{True Positives} + \text{True Negatives}) / \text{Total Predictions}$$

Precision: Also known as positive predictive value, this metric is the ratio of true positives to the sum of true and false positives. It's a measure of a classifier's exactness. A low precision indicates a high number of false positives.

$$\text{Precision} = \text{True Positives} / (\text{False Positives} + \text{True Positives})$$

Recall: Also known as sensitivity, this metric is the ratio of true positives to the sum of true positives and false negatives. It's a measure of a classifier's completeness. A low recall indicates a high number of false negatives.

$$\text{Recall} = \text{True Positives} / (\text{False Negatives} + \text{True Positives})$$

Pupil Distortions: a different unequal shaped (tadpole-like/non circular) pupil is noticed.

Selective Serotonin Reuptake Inhibitors (SSRIs): most commonly used prescribed antidepressants that can ease symptoms and typically cause fewer side effects.

Biomarker: biological molecule found in blood, other body fluids, or tissues that is a sign of a normal or abnormal process of a condition or disease.

Depression: a mood disorder that causes a persistent feeling of sadness and loss of interest.

Anxiety: feeling of fear, dread, or uneasiness

Mass Killing: killing two or more people over a period of time

Suicide: death caused by injuring oneself with the intent to die

1.4 Revision Updates

Other updates that were additional to enhance the overall project scope was first, an integrated AI Chatbot Feature that gives information about Visual Intelligence. The chatbot uses machine algorithms to analyze and reply back to when a user fills out an input field. The responses give information about the website and possible recommendations about the goals of

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the company. The ecommerce feature gives a platform to sell the book “How To Prevent Mass Shooting: A Scientific Journey Towards A Solution” By Jacques Ohayon Ph.D. This can give interested users an opportunity to access scientific research concerning societal issues. Utilizing Constant Contact, we were able to create a newsletter that reached out to public health experts and doctors.

Chapter 2: Project Management

2.1 Task Analysis

In analyzing our goals for this project, we split the work into sprints in an effort to organize the large amount of changes we set out to make. We first identified which tasks were of the highest priority for our primary stakeholders to have accomplished by the end of the project. These were: research and report our recommendations for the ethical usage of AI in medicine and drug discovery, improved marketing and purchasing options for our sponsor’s book on the website, and improved community reach of our sponsor’s work. Therefore, we prioritized these tasks first which is reflected in our sprint breakdowns. In splitting the tasks into sprints, we first chose to address these crucial components, and added the extra tasks we hoped to accomplish if time allowed to the later sprints to ensure that we completed our top priorities first.

However, we also had to consider the dependencies of certain tasks on each other. For example, for implementing our ethical guidelines, this task required substantial research and planning before development could begin on the staging site. So our focus for this component in the earlier sprints was on researching the topic, compiling our recommendations, constructing our template, and planning how to present these findings in the most user friendly and readable

way. Similarly in accomplishing the greater community reach and marketing goals set for us, we had to identify what information was most important to our sponsor to highlight in our Constant Contact flyer. Therefore, tasks related to preliminary information and planning were prioritized first as they would drive the implementation of all related tasks in later sprints. Now we will breakdown the major tasks of the project and what they entailed:

Book and E-commerce integration: A major requirement of our project was adding materials related to our sponsor's book "How to Prevent Mass Killing". Initially there was no readily available information related to the book on the website meaning users could not easily learn about it and had no purchasing options. Our initial goal was to add a page dedicated to promoting the book and providing some information about it. Furthermore, we also wanted to add some functionality to purchase and review the book directly onsite. Lastly, we wanted to add a page dedicated to highlighting important quotes and content from the book and directly linking them to the referenced material used. This would provide the user with a preview of the book's content along with their verifiable references, in hopes to provide more incentive for purchase.

Ethical AI Usage Recommendations: This task focused on researching existing AI models built for use in the medical industry and drug discovery field and from there compiling our findings and recommendations. In order to accomplish this we first had to identify what information was most important to highlight and come up with a good format to present our work. We then had to add a new page to the site and migrate our work to it. Additionally we wanted to create a template available for download and use by industry professionals aiming to adhere to the recommendations put forth. Lastly we wanted to include examples of our referenced materials in our research phase so users and professionals alike could learn more about the topic and how we came to our finding

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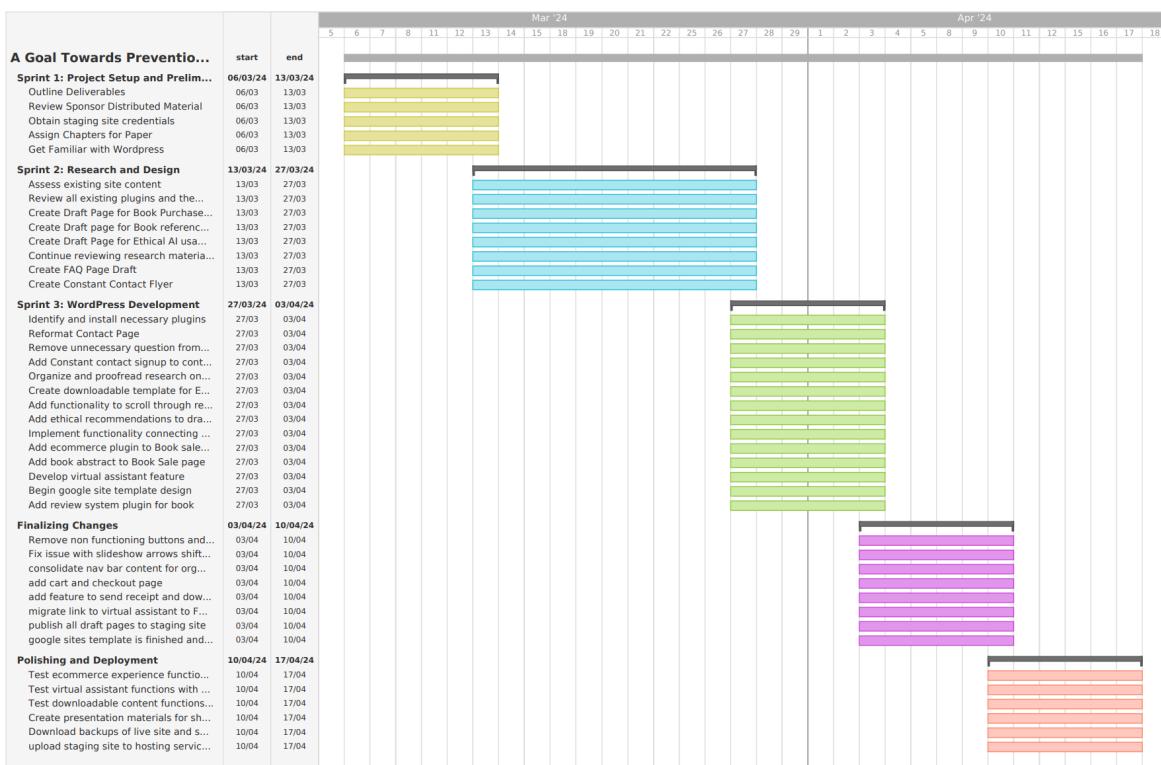
Community Reach: This task was multifaceted in that it included addressing multiple portions of the site to make its content more accessible to users and encourage continued connections. Our process of addressing this task was to integrate a way to sign up for a Constant Contact newsletter so that users could continue to receive news and updates from our sponsor. Furthermore, we set out to update the contact us page to encourage more users to interact with it. We also wanted to implement a FAQ page in order to address any topics that may be unclear to the user and commonly asked questions. Lastly, we wanted to implement a virtual assistant that the user could interact with in order to address any questions related to the site's content in a casual conversational manner.

General Fixes: Tasks related to general fixes related to addressing existing issues on the site. When we began working with the existing site, we noticed issues such as broken links, non functioning buttons, and layout flaws. We wanted to address each of these issues by either fixing or removing features that did not offer value to the site in their current state. We also wanted the site to be easier to navigate and appear less disorganized so we wanted to group pages neatly in the navbar to allow users to quickly find the information they were looking for. Lastly we wanted to come up with a new design to modernize the appearance of the site.

2.2 Gantt Chart/Work Breakdown Structure

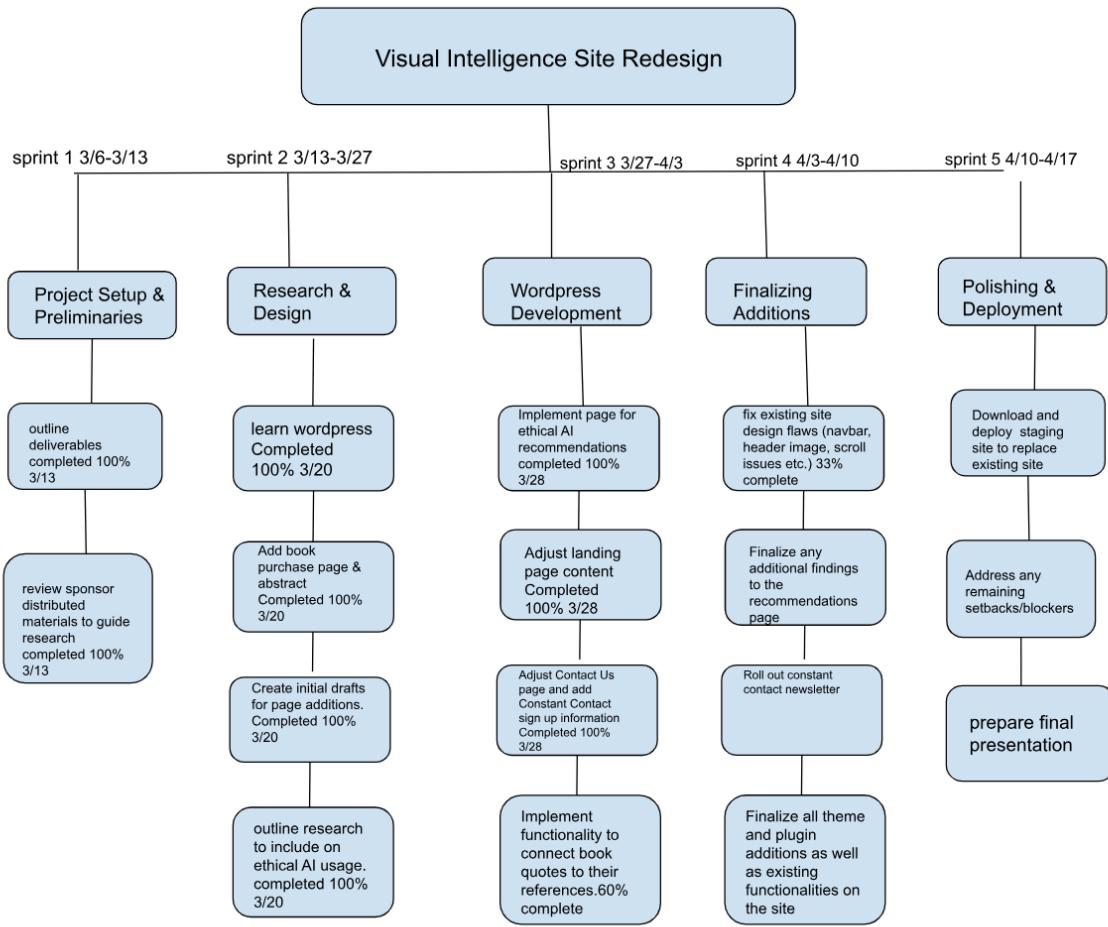
Gantt Chart:

Stephanie McCarten



Work Breakdown Structure:

Stephanie McCarten



2.3 Team Roles

Jacques Ohayon(Sponsor) functioned as our sponsor and guide throughout the project.

He provided many of the research materials we used, and aided our development by providing feedback and specifying his priorities throughout the process.

Stephanie McCarten (PM) Handled the creation and division of tasks and acted as a point of contact between the team members and sponsor. Furthermore, she planned weekly meetings where teammates were able to discuss their work throughout the sprints, any challenges they were facing, and progress. Additionally she was responsible for creating presentation

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materials and submissions of work. She also worked on the general fixes to existing site problems.

Alianna Panganiban (Team Member) Worked primarily on the community outreach tasks related to this project. She designed the Constant Contact newsletter and implemented it on our site. Furthermore she updated the design and content of the contact us page, as well as the FAQ page.

Kevin Busseno (Team Member) Worked primarily on all of the tasks relating to adding pages with information about the book, its references, and all ecommerce related tasks such as the checkout process and shopping cart view. Furthermore he configured our development environment and handled the deployment of our site changes.

Brian Bates (Team Member) Worked on compiling and editing our ethical recommendations for AI usage in the medical industry. He implemented the page on our site to display our findings, as well as designed the template available for download, and slideshow of references.

Norsang Nyandak (Team Member) Fully handled development of the virtual assistant in order to answer any questions regarding the content of the site, as well as made it readily available to users. He furthermore designed a new modernized theme for the site through Google Sites, which is available for import and use on WordPress in the future.

2.4 Risk Identification and Management

When assessing the risks associated with our project, we had to consider all potential impacted parties, as well as all of the features we were planning on adding and editing throughout the process. First and foremost, when editing an existing site, there exists the risk of

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corrupting existing content and making irreversible changes. To mitigate this risk, we only made edits on a staging site, a copy of the live site hosted on a separate URL, so that if there were any mistakes or issues, they would not be reflected on the live site. Working in this manner gave us more creative freedom to test potential changes without the fear of causing irreversible damage to the live site. Furthermore we kept downloaded backups of the staging site in case anything needed to be rolled back to a previous version that could not be accomplished through in-platform editing.

Another risk we had to consider was the impact of our statements and recommendations regarding the ethical usage of AI in the medical industry and drug discovery field. We had to take great care in using clear, readable language that could not be misinterpreted or difficult for users to understand. We also had to verify that our recommendations made sense in the context of the field, and that they were backed up by extensive research. We addressed this risk by studying a wide variety of materials provided to us by our sponsor, and ensured that these materials came from reliable sources such as medical journals and formal reports. Our recommendations went through multiple iterations of edits and clarification with the help of our sponsor to ensure we were communicating exactly what we set out to.

Furthermore, with the integration of ecommerce to our site, we had to especially ensure security was robust, and that user information would be protected. This risk was addressed by adding reliable security plugins available through WordPress such as Jetpack and Really Simple SSL and ensuring these plugins were functional and updated.

The last major risk we identified was migrating the staging site to the live site. In deployment it is possible to observe unpredictable behavior, bugs, and formatting issues. To reduce this risk, we extensively tested our added features on the staging site first before

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deployment. Furthermore, we kept downloads of the existing live site in the event we encountered issues, we could always revert the site back to the previous version and address any noticed problems.

Chapter 3: Define

3.1 Stakeholder Identification

In identifying stakeholders we had to consider all entities impacted by the direction and outcome of our project.

Visual Intelligence LLC (Jacques Ohayon): Our primary stakeholder was Jacques Ohayon and his company Visual Intelligence LLC. He was responsible for providing us direction, materials, and credentials to be able to make the necessary changes. In entrusting us with editorial access to his website and proprietary research, he expected us to deliver a functioning product updated with the required information, features, and general improvements.

Visual Intelligence LLC Team (Stephanie McCarten, Alianna Panganiban, Kevin Busseno, Brian Bates, Norsang Nyandak): This is the team of students responsible for development of the site updates and changes. They are responsible for addressing and implementing the necessary changes to the site per the project scope. Furthermore they are responsible for providing updates and demos to the sponsor to ensure their solutions are aligning with the sponsor's needs.

NJIT Capstone Program(Dr. Osama Eljabiri, and Operations Team): These are the members and facilitators of the NJIT Capstone Program. They are responsible for conveying pertinent information regarding program requirements, connecting students with sponsors, and assessment of deliverables.

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Industry Professionals (General): This encompasses developers and professionals that participate in the development of AI models used in the medical industry and drug discovery field.

The General Public: This encompasses the everyday users that will interact with the site through navigation, contacting the company, and carrying out transactions.

3.2 Requirements Gathering

The following requirements were identified as necessary features for the team to deliver their project:

Access to Sponsor Research Materials and Book: In order to complete certain tasks such as publishing our findings on ethical AI usage and information regarding the book, we needed to learn more about the work Visual Intelligence LLC focuses on. By having access to certain research materials and the published work of our sponsor, we would gain more context and information on the topics we were to cover.

Access to Site Editing Platform: To edit or implement any changes to the existing site, we needed access to the site editing platform. This required our sponsor to provide us with the necessary information and credentials in order to deliver on our tasks.

Communication Channels: To ensure our work was moving at the proper pace and continually aligning with our sponsor's vision, it was crucial that we had a means to communicate with them and showcase our changes. This was accomplished through weekly meetings with our sponsor to demo and discuss our changes as they were made, as well as additional separate meetings among the team members to check in with each other on the work we've been doing, as well as any blockers we were facing.

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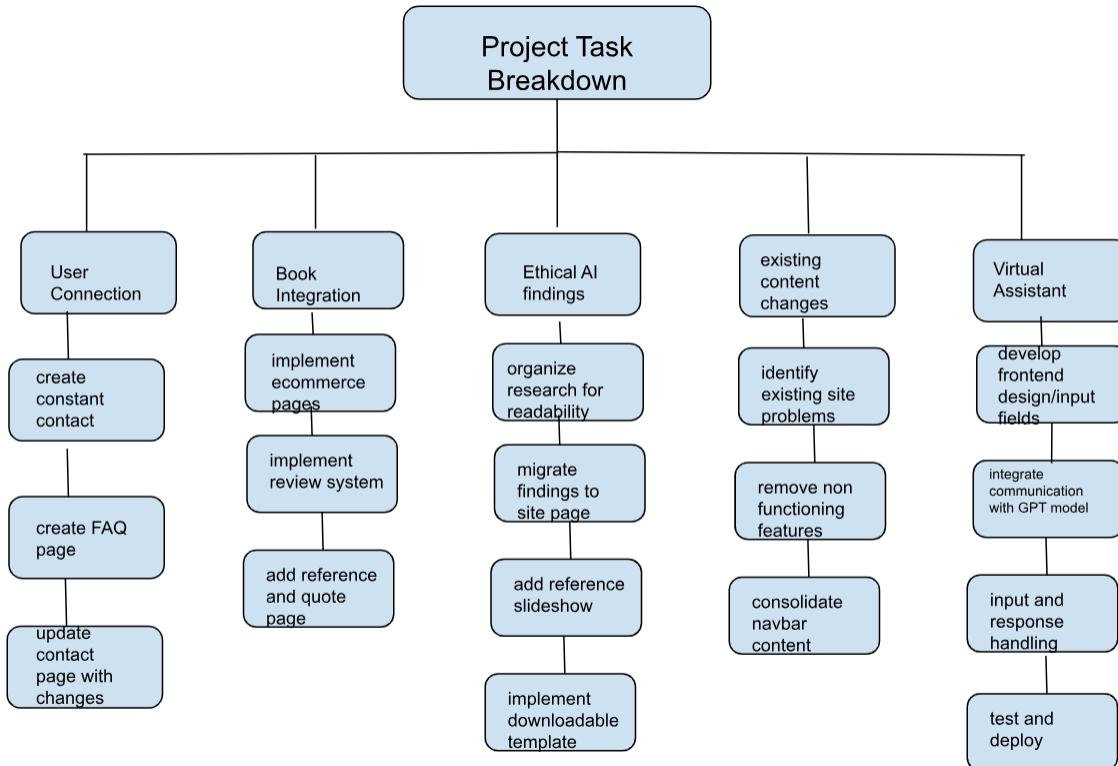
3.3 Project Scope

The scope of this project is primarily to research and report on the ethical usage of AI in the medical industry, as well as aid our sponsor in the promotion and reach of their existing work. This is to be accomplished by editing his existing website: visualintelligence.us to reflect these changes.

Project Deliverables:

- A page presenting our ethical recommendations for the usage of AI in the medical industry and drug discovery field.
- The addition of materials regarding our sponsor's book "How to Prevent Mass Killings" as well as purchasing options on site
- Integration of Constant Contact Newsletter and other features to improve the current community reach of the site content

3.4 FDD Requirement Grouping



Chapter 4: Design

4.1 Overview

This chapter outlines the design considerations and architectural choices made in refactoring the Visual Intelligence website and integrating an AI chatbot. The enhancements are aimed at improving user interaction, showcasing services, and leveraging artificial intelligence to offer advanced diagnostic and informational tools.

Stephanie McCarten/Norsang Nyandak

4.2 Website Design

In the redesign of the Visual Intelligence LLC. website, significant attention was dedicated to enhancing both the aesthetic appeal and functionality to better serve the needs of users and accurately represent the company's mission. The redesign involved a collaborative approach, utilizing WordPress as the primary content management system (CMS), Figma for interface design, and Google Sites for alternative layout testing.

WordPress: As the backbone of our website, WordPress was chosen for its flexibility and extensive support for diverse content needs. It enabled us to create a robust, scalable platform capable of integrating advanced functionalities, including the AI chatbot. WordPress's wide range of plugins and themes allowed us to customize the site to meet specific requirements, such as accessibility and user interaction, ensuring that the website is both powerful and easy to navigate.

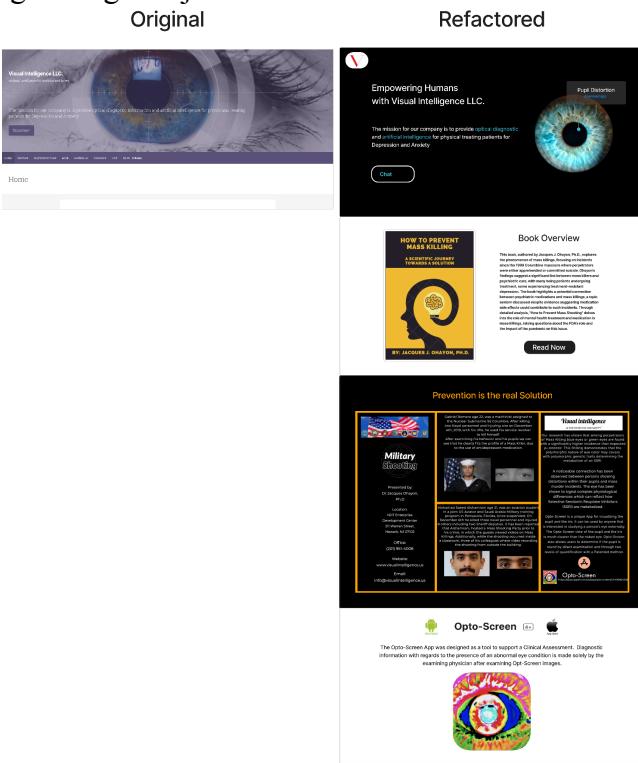
Figma: To ensure that the website's design was both modern and user-friendly, Figma was employed to craft high-fidelity prototypes before any code was developed. This tool facilitated a detailed visualization of the user interface, which was crucial for iterative feedback and refinement. Through Figma, we conducted several design sprints, involving stakeholders in the process to gather input and validate design choices. The result was a set of well-thought-out designs that not only look professional but also enhance user engagement through intuitive layouts and coherent visual elements.

Google Sites: In exploring alternative designs and layouts, Google Sites was utilized to prototype potential changes without altering the live site. This approach allowed us to experiment with different aesthetic and navigational structures to determine which best-enhanced

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user experience and content delivery. It provided a risk-free environment to test new ideas, gather user feedback, and iterate quickly based on real-world usage and analytics.

Throughout the design process, considerable thought was put into every aspect of the site's functionality and user interaction. The design team focused on creating a seamless flow that effortlessly guides users from one section to another, thus enhancing the overall user experience and ensuring easy access to information. By integrating responsive design principles, the website is made accessible and performs well across all devices, from desktops to mobile phones. This meticulous approach to website design underscores our commitment to delivering a platform that not only meets the technical and aesthetic standards expected of modern web applications but also supports the company's goals of effectively disseminating critical information and services. Leveraging the strengths of WordPress, Figma, and Google Sites, we have developed a robust, adaptable, and visually appealing website that exemplifies our dedication to superior design and functionality in achieving strategic objectives.



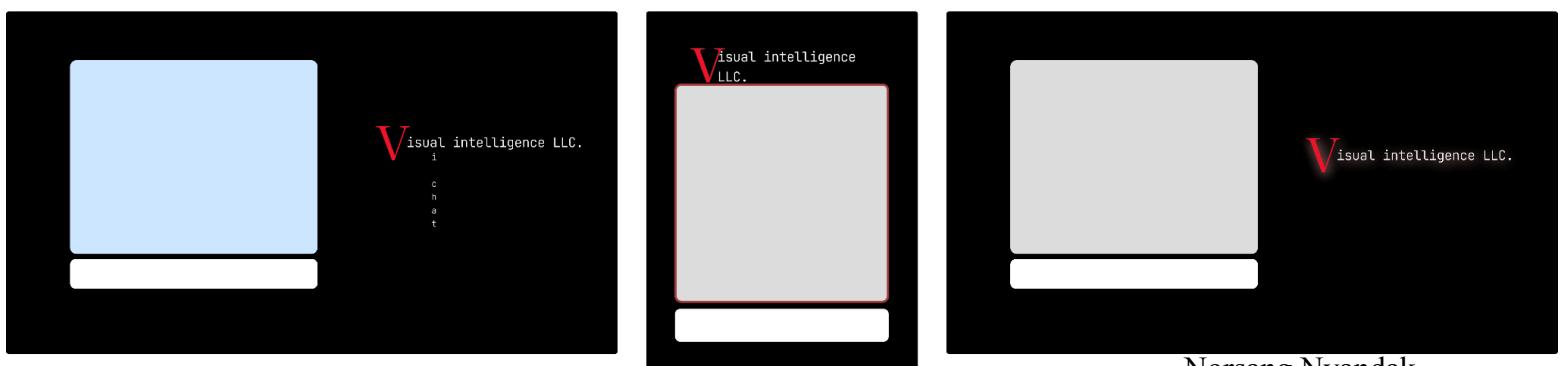
Norsang Nyandak

4.3 AI Virtual Assistant Design

The design of the AI Virtual Assistant incorporated a robust blend of technologies to ensure responsiveness, scalability, and a seamless user interface. Utilizing OpenAI's GPT technology, the assistant was developed to provide intelligent and contextual responses to user queries, making it a pivotal tool for interactive communication on the website. The Vercel AI SDK was instrumental in deploying and managing the AI models efficiently, ensuring that the assistant could handle multiple interactions simultaneously without compromising performance. Figma played a critical role in the visual design of the chatbot interface, enabling the team to prototype and refine the user experience before implementation. This ensured that the virtual assistant was not only functional but also aesthetically pleasing and easy to navigate. Tailwind CSS was used to style the frontend components, providing a consistent and modern look that aligns with the overall design of the website.

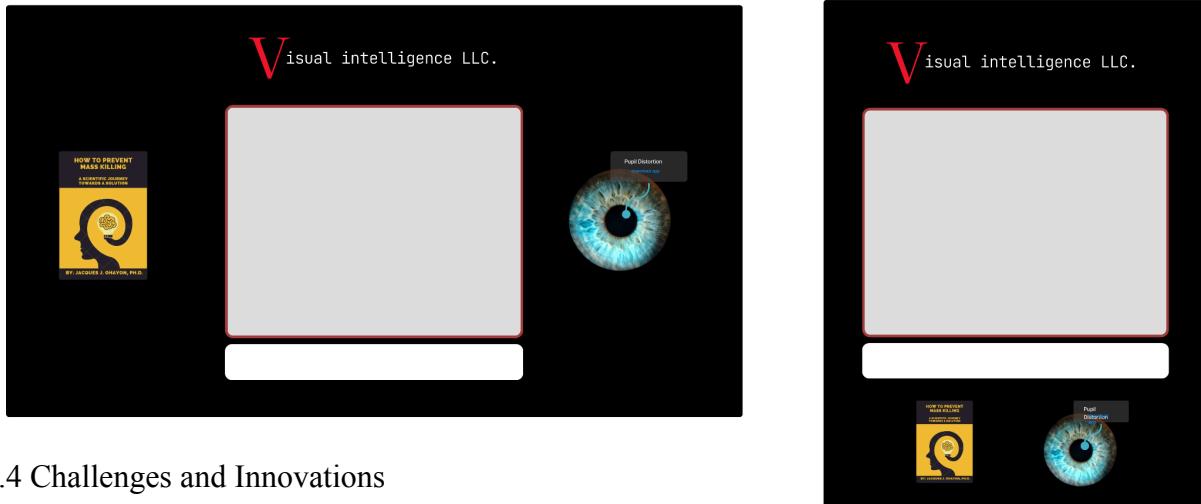
The programming stack comprising TypeScript, Next.js, and React facilitated the development of a robust and interactive frontend. TypeScript ensured that the code was maintainable and error-free, while Next.js provided the framework for server-side rendering, improving SEO and page load times. React's component-based architecture allowed for a dynamic and responsive user interface, enabling real-time interaction and a smooth user experience across different devices.

Alternate Designs



Norsang Nyandak

Final Design



4.4 Challenges and Innovations

Technical Challenges

Integrating AI functionalities into a WordPress-driven website posed substantial challenges, particularly in connecting the API for the AI chatbot and ensuring its seamless operation. The process of embedding and utilizing the AI API within WordPress's PHP environment required significant adaptation and testing to maintain security and functionality. Additionally, fine-tuning the large language model (LLM) to accurately respond to user inquiries related to mental health proved to be complex, requiring iterative adjustments to enhance the model's accuracy and responsiveness across various devices.

Innovative Aspects

The project's innovative core lies in the deployment of a sophisticated AI chatbot designed to diagnose mental health conditions through user interactions. This technology represents a novel approach in mental health support, providing immediate, intelligent feedback. The design enhancements brought by utilizing modern web technologies like React and Next.js

Norsang Nyandak

also significantly improved the overall user experience, making the platform more intuitive and engaging for users seeking mental health information and support.

4.5 Conclusion

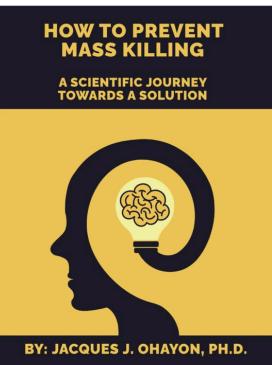
This chapter detailed the thoughtful design and implementation of the Visual Intelligence website and AI Virtual Assistant, highlighting the challenges overcome and innovations introduced. By integrating advanced AI capabilities into a WordPress environment and fine-tuning a responsive, user-friendly interface, the project successfully enhanced user engagement and accessibility. The AI chatbot, a standout feature, leverages cutting-edge technology to provide critical mental health diagnostics, showcasing our commitment to leveraging technology for societal benefit. This design sets a strong foundation for future enhancements and ensures that the platform remains a valuable resource in the field of mental health and safety.

Chapter 5: Development

5.1 Selling the Book

The first major implementation was adding a way to directly sell Jacques J. Ohayon Ph.D's book, *How To Prevent Mass Killings*, on the website. Users may now leave a review right on the website about the book for others to see, including ratings and comments. There is also now, with the help of Woocommerce, a view of the current cart that can lead to the checkout where users fill out their billing information and pay to receive the e-book.

Home / Book / How to Prevent Mass Killing



How to Prevent Mass Killing

A SCIENTIFIC JOURNEY TOWARDS A SOLUTION

\$9.99

This Book is about Mass Killing and why it occurs. The author Jacques J. Ohayon, Ph.D., has studied almost every incident that falls into the category of a Mass Killing in which the perpetrator is immediately apprehended or commits suicide since 2016. This group comprises the majority of the incidents going back to the Columbine, Colorado massacre in 1999. How To Prevent Mass Shooting reflects the finding that the majority of Mass Killers are medical patients, more particularly patients receiving psychiatric care and medication from a physician. We find that some perpetrators can be considered treatment failures or suffering from Treatment Resistant Depression.

Category: Book

Description Reviews (0)

Reviews

There are no reviews yet.

Only logged in customers who have purchased this product may leave a review.

1. Contact information
We'll use this email to send you details and updates about your order.

Email address:

I would like to receive exclusive emails with discounts and product information

2. Billing address
Enter the billing address that matches your payment method.

First name: Last name:
 Address
 Apartment, suite, etc. (optional)
 Country/Region United States (US)
 City: State: New Jersey
 ZIP/Postal code: Phone (optional):

3. Payment options

Credit card / debit card

Card number: Expiration: CVC:

Add a note to your order

By proceeding with your purchase you agree to our Terms and Conditions and Privacy Policy

[Return to Cart](#)

Cart

PRODUCT	TOTAL	CART TOTALS
 \$9.99 This book is about Mass Killing and why it occurs. The author Jacques J. Ohayon.	\$9.99	Add a coupon Subtotal \$9.99 Total \$9.99

[Proceed to Checkout](#)

5.2 Quotes:

To validate the claims the book makes, some of the quotes found in the book were added to the site. The quotes include the page number of the book they come from too so users can look the quotes up themselves. The learn more buttons lead to the National Library of Medicine website to give further insight into each quote. This page also has links to lead back to the book and also a link for users to learn about New Drug Applications from the FDA.

Brian Bates

Proper Use of Statistical Packages

Direct Quotes from Book



Page 122

First Experience Working on Pharmaceutical Cases



Page 107

In approximately March of 2006, I met Dr. Hersh's father, an optician in the men's room of the building, and he expressed concern that some of his patients were experiencing severe eye infections called Fusarium Keratitis. As it turned out, there were patients worldwide experiencing the same illness. It was an outbreak, and some patients were losing their vision. It was occurring in 33 different States of the US as well as in Hong Kong and Singapore. New Jersey had reported three cases to the CDC by March 2006, Chang et al. 2006.

[Learn More](#)

MMRM analysis is preferred in psychiatric clinical research when using repeated measures, not necessarily difference scores. There are several limitations due to the relationship between baseline and repeated measures mean, referred to as covariate time interaction. Neither TRD 3002 nor 3001 account for this factor, referred to as interaction, Schuler, 2022. Schuler's paper is well supported with mathematical simulations and, unfortunately, shows the inherit weakness of using MMRM models for analyzing clinical trials without controlling for time interactions. The other issue often found in clinical studies is when MMRM is used when partial data are excluded, i.e., dropout data. This is a misuse of MMRM since it can result in lower power and larger confidence intervals when time interactions are not considered.

[Learn More](#)

[How to Prevent Mass Killings](#)

[FDA NDA Guidelines](#)

5.3 FAQ and Contact Us:

This is a total reworking of the FAQ and Contact Us pages. This gave the FAQ section a page of its own for people to direct to for common questions and help understand the site and its products. Additionally, we removed unnecessary requirements for people to contact us and added the ability to sign up for the newsletter from this page.

Frequently Answered Questions (FAQ)

- What does your company offer for physicians treating patients with depression and anxiety?
Our company provides cutting-edge optical diagnostic tools that are designed to assist physicians in diagnosing and treating patients with depression and anxiety. We offer an Opto Screen application that provides valuable insights of a patient's mental health status.
- How does Visual Intelligence aid physicians in diagnosing Depression and Anxiety?
Our technology provides information to aid physicians in making decisions about treatment plans with specific assessment methods to ensure patients well-being. By analyzing patient data, it aids to identify potential complications and indicators.
- How does your optical diagnostic technology work?
Our optical diagnostic technology analyzes non-invasive imaging techniques to capture detailed information about the physiological and neurological aspects of a patient's condition by detecting biomarkers.
- Is your technology FDA-approved or undergoing clinical validation?
Yes our technology has undergone the validation process ensuring compliance with applicable regulatory regulations and guidelines.

Need additional information or have a question or comment? Please leave a message and someone from our team will contact you.



Fields marked with an * are required

Name *

Email *

Message *

Sign Up for our newsletter to receive news and exclusive content about the innovations for the treatment of depression

[Send](#)

More Questions? Click here to interact with our Visual Intelligence Virtual Assistant!

5.4 Constant Contact/Newsletter:

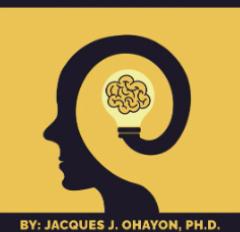
This is the initial newsletter to reach out to professionals and everyday people. This gives an overview of the site, book, and app with resources to connect and learn more about what is Brian Bates

going on in this field. This letter also gives more information about Jacques J. Ohayon Ph.D for a better background and understanding of his credentials. Any time users want to opt out of these constant contacts, there is an unsubscribe link at the bottom.



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

HOW TO PREVENT MASS KILLING
A SCIENTIFIC JOURNEY TOWARDS A SOLUTION



BY: JACQUES J. OHAYON, PH.D.

Stay Up-To-Date with innovations for the treatment of depression

Maintain continuous insights by subscribing to our newsletter based on Jacques J. Ohayon's book "How To Prevent Mass Killing, A Scientific Journey Towards a Solution". You'll receive exclusive content, real time incident reports, and institutional pricing. Don't miss out on the opportunity to read our highly anticipated book.

Sign up now!

[Purchase Here](#)



FAQs Answered by the Pros

Given the severity of the epidemic, Jacques J. Ohayon Ph.D, placed full attention to research and made a medical discovery relating to the visual physiology of perpetrators of mass killing and suicide. He received his bachelor's degree from the State University of New York at Stony Brook, graduating in 1975. He received his master's degree in Psychology 1978 and Ph. D in Public Health 1984, from the University of Pittsburgh.

[Visit Our Website](#)

Opto-Screen 2 Available on Google Android and Apple iOS
<https://play.google.com/store/apps/details?id=com.visual.intelligence.us.optoscreen>

Web Site:
<https://www.visualintelligence.us> Opto Screen 2



201-951-4008 phone



apple.co/2jwqkLJ
bit.ly/2jwqkLJ
m.visualintelligence.us/optoscreen/

Visual Intelligence LLC.
Artificial Intelligence for Medicine and Safety
Office: 201-951-4008



Opto-Screen Covered by US Patent # 10,182,755

Photographs are based on internet content using accepted scientific techniques evaluated by members of the Ophthalmic Photographers Society. NOT live photos of patients or perpetrators.

Connect with us!



Visual Intelligence, LLC | 211 Warren Street, Newark, NJ 07103

[Unsubscribe](#) info@visualintelligence.us

[Update Profile](#) | [Constant Contact Data Notice](#)

Sent by info@visualintelligence.us powered by



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Brian Bates

5.4 Revamped navigation bar:

This new navigation is decluttered and makes it easier to find specific pages. Home, services, and book all have drop menus to bring related pages closer together and still give them their own respective pages. The previous bar seemed over-cluttered. You can also see the new Medical AI page alongside the checkout for the book.



5.5 Medical AI Template:

This is a template of questions that should be answered by people implementing new medical AI models for patient care. All these questions need to be answered for both a universal understanding of the model and an ethical assurance of correctness. These metrics were designed to be reported at the beginning of any paper for a quick understanding.

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?

What were the results of this model? Report using the standard methods described below. Focus on the confusion matrix, recall, precision, and accuracy to create a standardized explanation.

How does this model compare to other non-algorithmic assessments and existing algorithms? Does this model demonstrate improvement compared to humans and other models?

Is this a viable method? Is this model a replacement for humans or a supplement? How would this be used as a supplement when with human intervention? Should it be reported with and without human intervention?

Standardizing Terminology - for experts as well as novices. These all must be reported at the top of the paper to give a clear understanding of the results of this model.

True Positive (TP): This is an outcome where the model correctly predicts the positive class.

False Positive (FP): Also known as a Type I error, this is an outcome where the model incorrectly predicts the positive class.

True Negative (TN): This is an outcome where the model correctly predicts the negative class.

False Negative (FN): Also known as a Type II error, this is an outcome where the model incorrectly predicts the negative class.

Confusion Matrix: This is used to organize and display the TP, FP, TN, and FN. This is a 2x2 grid with TP on the top left, FP on the top right, FN on the bottom right, and TN on the bottom left. Here is an example layout:

TP	FP
FN	TN

Accuracy: This is the proportion of true results (both true positives and true negatives) among the total number of cases examined. It's calculated as:

$\text{Accuracy} = (\text{True Positives} + \text{True Negatives}) / \text{Total Predictions}$

Precision: Also known as positive predictive value, this metric is the ratio of true positives to the sum of true and false positives. It's a measure of a classifier's exactness. A low precision indicates a high number of false positives.

$\text{Precision} = \text{True Positives} / (\text{True Positives} + \text{False Positives})$

Recall: Also known as sensitivity, this metric is the ratio of true positives to the sum of true positives and false negatives. It's a measure of a classifier's completeness. A low recall indicates a high number of false negatives.

$\text{Recall} = \text{True Positives} / (\text{True Positives} + \text{False Negatives})$

[!\[\]\(39f135ab0b8db67a0c053a15141ea204_img.jpg\) Download This Template](#)

5.6 Template PDF:

This is the same template as above, but when you click the download template button at the bottom, you're given an editable PDF. This can be shared and included in papers easily so these standards can easily be incorporated. Alongside this, underneath the template on the webpage are two example papers. Users can read what they did right and wrong alongside an example filled-out template.

Brian Bates

Medical ML Model Template:					
Why was this ML model made? Why was it necessary to create this model? What does it provide that we do not already have?	Standardizing Terminology - for experts as well as novices. These all must be reported at the top of the paper to give a clear understanding of the results of this model.				
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?	True Positive (TP): This is an outcome where the model correctly predicts the positive class. Reported True Positives:				
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?	False Positive (FP): Also known as a Type I error, this is an outcome where the model incorrectly predicts the positive class. Reported False Positives:				
What were the results of this model? Report using the standard methods described below. Focus on the confusion matrix, recall, precision, and accuracy to create a standardized explanation.	True Negative (TN): This is an outcome where the model correctly predicts the negative class. Reported True Negatives:				
How does this model compare to other nonalgorithmic assessments and existing algorithms? Does this model demonstrate improvement compared to humans and other models?	False Negative (FN): Also known as a Type II error, this is an outcome where the model incorrectly predicts the negative class. Reported False Negatives:				
Is this a viable method? Is this model a replacement for humans or a supplement? How would this be used as a supplement when human intervention? Should it be reported with and without human intervention?	Confusion Matrix: This is used to organize and display the TP, FP, TN, and FN. This is a 2x2 grid with TP on the top left, FP on the top right, FN on the bottom right, and TN on the bottom left. <table border="1"><tr><td>TP</td><td>FP</td></tr><tr><td>FN</td><td>TN</td></tr></table> Accuracy: This is the proportion of true results (both true positives and true negatives) among the total number of cases examined. It's calculated as: $\text{Accuracy} = \frac{\text{True Positives} + \text{True Negatives}}{\text{Total Predictions}}$ Reported Accuracy:	TP	FP	FN	TN
TP	FP				
FN	TN				

Here are some example papers:

Diabetic Retinopathy Example

This paper on Diabetic Retinopathy could benefit from our standards. Here are the key areas to focus on: [Diabetic Retinopathy paper](#).

Here are some things this paper should improve:

1. The paper should articulate the necessity of the proposed model and discuss its advantages over human verification. This would help readers understand the value and impact of the research.
2. The authors have opted for an AUC-MD approach and a smaller sample size than previous models. It would be beneficial if they justified these choices to give readers a better understanding of their methodology.
3. The paper should include a comprehensive report of key metrics. These metrics include a confusion matrix, accuracy, precision, and recall. The clear reporting of these metrics is crucial for evaluating this model's performance.

Here is an example of the template filled out for Diabetic Retinopathy: [Diabetic Retinopathy Example](#)

5.7 AI Must Dos:

These are more rules to standardize the user of AI. These are not questions like the previous template but rather just regulations. These are used to ensure these models have an effective result with patient-centered care. This includes an explanation of the need for these standards with a rising cancer rate and \$56 billion going into healthcare AI.

Brian Bates

More "Must Dos" for AI in medicine and drug discovery

Note: This still is non-exhaustive and will continuously be updated as AI and research continue to grow and change.
Requirements:

1. **Signs of remission:** The effectiveness of new medicines should be gauged by their ability to induce remission. When there are already established and well-studied drugs available, new drugs must demonstrate their benefits not only through inducing remission but also in prolonging life. This becomes even more critical in situations where there are no established drugs or in the case of terminal diseases. In such scenarios, the new drug must significantly prolong life while also ensuring a minimum acceptable quality of life for the patient. To truly understand the impact and effectiveness of the new drug, a published comparison with established medicines should be made available. This allows for a clear understanding of the differences and potential advantages of the new treatment. The goal of any new treatment should always be to improve the patient's health and quality of life, and remission is a key indicator of this improvement.
2. **An AI model is not a clinical study:** These models have the power to find new and unique solutions we have not seen before and do trials at a rapid pace. However, we cannot yet guarantee the certainty of these models without a physical study being done. Patients with any illness are already suffering and should not be blindly subjected to these model results without proper testing. The results of these models still aren't guaranteed and need professionals to verify and test these findings. It's important to remember that relying solely on AI models without proper verification could lead to inaccurate diagnoses or treatments, potentially causing harm to patients. Therefore, while AI has immense potential in healthcare, it must be used responsibly and ethically, with patient safety and well-being as the top priority.
3. **Publish findings and research with medicinal AI models:** For the betterment of the fields as a whole, all findings, successes, and failures, should be published for everyone to study and learn from so future models can improve. All reports must include a confusion matrix, accuracy, precision, and recall results clearly at the top of the paper. These are only the minimum required to help explain the reliability of these models. Failing to adhere to these practices could lead to a lack of transparency and reproducibility in AI research, which could in turn hinder progress and compromise the reliability of AI models in healthcare.
4. **Transparency/white box models:** The decision-making process of the AI should be a transparent white-box process and explainable to healthcare professionals. This also coincides with the fact that AI algorithms should be thoroughly validated using large and diverse datasets before deployment. This will help ensure the accuracy and range of training. While transparent, there must also be continuous monitoring by professionals for its accuracy. A white-box process means that the decision-making process of the AI is clear, understandable, and explainable. This transparency is crucial, especially in healthcare, where understanding the reasoning behind predictions can impact patient care and outcomes. While these models are transparent, they should also be continuously monitored by professionals to ensure their accuracy. This kind of monitoring is only possible with a white box model. On the other hand, black box models are harder to interpret and understand. Typically, black box only provide the input and output which makes them less desirable in situations where transparency and auditing is critical.
5. **AutoML does not replace data scientists:** An AutoML begins with a raw dataset and builds a machine learning model that can ready for deployment. However, the problem is these models have not been vetted for accuracy and are black box models. They are meant for nonprofessionals to have access creating a basic models for low stakes use. They are not at the same standards as a professional data scientists' models and will have a decreased accuracy in comparison. For medical purposes, all models should be created and vetted by professionals. This is why data scientists play a crucial role in this process. They bring a deep understanding of data and the ability to interpret it in ways that machines currently cannot. They can make judgments about the relevance and accuracy of data, and understand the context of the problem, which is crucial for building effective models. Data scientists also interpret the models, understand their limitations, and validate their results. They consider the ethical implications of models, including fairness, privacy, and potential misuse. While AutoML can increase accessibility, the expertise and skills of a data scientist are still crucial in the AI industry, especially in fields like healthcare where the stakes are high.
6. **Publish a database of Patients with consent:** Allowing access to the database will allow for public audits for accuracy, allow cleaning up for usability purposes, and could give access to more datasets for similar models to be using. This will allow for your dataset to be improved for your use, and allow researchers in the similar field to gain more reliable data. Also, it's crucial to remember that any sharing of patient data must be done with utmost respect for privacy and data security. Ensuring the anonymization of data and obtaining informed consent from patients are essential practices in this process
7. **Don't Ignore Any Context:** AI should always consider the context in which it is used. A solution that works in one setting may not work in another. Datasets should be provided with as much information as reasonably possible to ensure coverage of all possible outcomes. Training data must attempt to have exhaustive information about a patient. Ignoring the context could lead to inaccurate predictions or inappropriate solutions, potentially causing harm or inconvenience. Therefore, it's crucial to ensure that AI systems are designed and trained to be context-aware and adaptable.

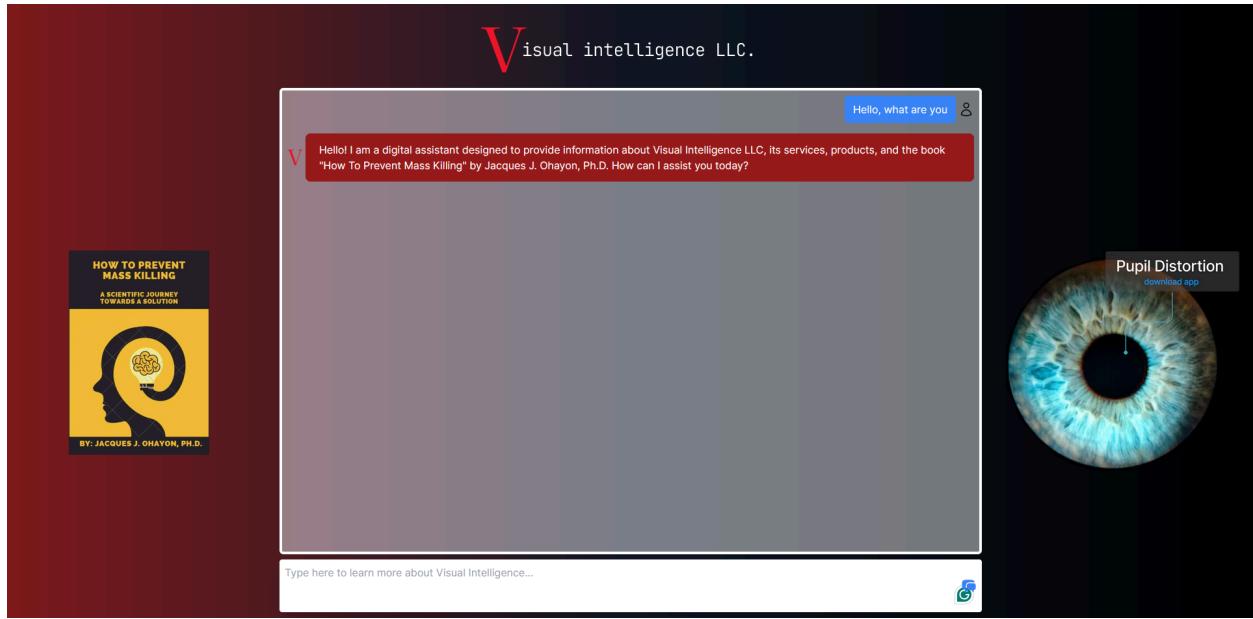
Why do we need these standards?

With Medical AI gaining in popularity, universal standards must be created. Research reports should incorporate accepted nomenclature and definitions. Our suggested goal for AI, given its potential is patient-centered with an emphasis on remission and cure. Our standards are designed to enhance the use of AI. We want to ensure that new research is ethical and effective while researchers expand their knowledge about the conditions and diagnostic categories they are studying. With society expecting to spend \$52 billion in healthcare AI in 2026, we would expect a benefit to improve individual health. Currently, cancer rates are going up for young people in GI and breast cancer plus new respiratory illness are being found in children; in 2020 we had a pandemic that resulted in 7.5 million deaths. Visual Intelligence LLC is creating these standards towards an improvement in overall population health.

5.8 AI Assistant:

This is an online LLM chatbot that is trained to answer questions that are based only on Visual Intelligence information. It can answer any questions users have on the company, app, or book. There is also a link to the book and app on either side of the chat window. If any questions are asked not about the company, it redirects the conversation back.

Brian Bates



5.9 Landing Page:

This is an alternate landing page design that was created in Google Sites. It was made with the intention of giving the site a more modernized style. Currently, it is being held as an alternative look that can be imported at any time. Alongside the new intended style, this would also give the book a place on the home page.

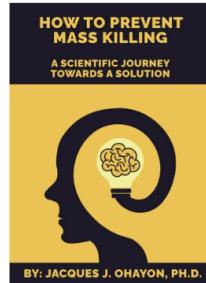
Brian Bates

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](#)

Pupil Distortion [download app](#)



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 killing, 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](#)

Prevention is the real Solution

Military Shooting

Presented by:
Dr. Jacques Ohayon,
Ph.D.

Location:
NJIT Enterprise
Development Center
211 Warren Street,
Newark, NJ 07036

Office:
(201) 951-4008

Website:
www.visualintelligence.us

Email:
info@visualintelligence.us

Gabriel Romero age 22, was a machinist assigned to the Nuclear Submarine SS Columbia. After killing two Naval personnel and injuring one on December 4th, 2015, with his handgun he used his service revolver to kill himself.

After examining his behavior and his pupils we can see that he clearly fits the profile of a Mass Killer, due to the use of antidepressant medication.

Mohamed Saeed Alshamrani age 21, was an aviation student in a joint US Aviator and Saudi Arabia Military training program in Pensacola, Florida, since suspended. On December 6th he killed three naval personnel and injured 8 others. It was later determined that Alshamrani, hosted a Mass Shooting Party prior to his crime, in which the guests viewed videos on Mass Killings. Additionally, the shooting occurred inside a classroom, three of his colleagues were video recording the shooting from outside the building.

Visual intelligence
AI FOR MEDICAL AND SAFETY

Our research has shown that among perpetrators of Mass Killing blue eyes or green eyes are found with a significantly higher incidence than expected ($p < 0.00001$). This finding demonstrates that the propensity for the use of color may vary with polymorphic genetic traits determining the metabolism of an SSRI.

A noticeable connection has been observed between persons showing distortions within their pupils and mass murder incidents. The eye has been shown to signal complex physiological differences which can reflect how Selective Serotonin Reuptake Inhibitors (SSRIs) are metabolized.

Opto-Screen is a unique App for visualizing the pupil and the iris. It can be used by anyone that is interested in studying a person's eye externally. The Opto-Screen view of the pupil and the iris is more clearer than the naked eye vision. It can also be used to determine if the pupil is round by direct examination and through two levels of quantification with a Patented method.

Opto-Screen



The Opto-Screen App was designed as a tool to support a Clinical Assessment. Diagnostic information with regard to the presence of an abnormal eye condition is made solely by the examining physician after examining Opto-Screen images.

[Download Now!](#)

Brian Bates

5.10 User Guides:

Buying the book:

Step 1: go to How to Prevent Mass Killing

Step 2: add to cart

Step 3: go to cart

Step 4: proceed to checkout

PRODUCT	TOTAL	CART TOTALS
How to Prevent Mass Killing \$9.99 This Book is about Mass Killing and why it occurs. The author Jacques J. Ohayon...	\$19.98	Add a coupon
		Subtotal \$19.98
		Total \$19.98

Brian Bates

1. Contact information
We'll use this email to send you details and updates about your order.

Email address
 I would like to receive exclusive emails with discounts and product information

2. Billing address
Enter the billing address that matches your payment method.

First name Last name
 Address
 Apartment, suite, etc. (optional)
Country/Region
United States (US)
 City State
New Jersey
 ZIP Code Phone (optional)

3. Payment options
Credit card / debit card

Card number 1234 1234 1234 1234
 Expiration MM / YY CVC

Add a note to your order
By proceeding with your purchase you agree to our Terms and Conditions and Privacy Policy

[← Return to Cart](#) **Place Order**

Step 5: enter your email, billion address, and payment info

Step 6: place order and receive your ebook

Contact Us/Constant Contact guide:

Home Services Pupil Distortions Book Medical AI Checkout Cart \$9.99 1 item

INSTRUCTIONS
Contact Us
Frequently Answered Questions (FAQ)

Need additional information or have a question or comment? Please leave a message and someone from our team will contact you.

Fields marked with an * are required

Name *

Email *

Message *

Sign Up for our newsletter to receive news and exclusive content about the innovations for the treatment of depression

Step 1: go to contact us

Step 2: provide your name

Step 3: provide your preferred email

Step 4: ask any questions or leave any message you want

Step 5: check this box for the constant contact newsletter

Step 6: submit the form

Brian Bates

Medical AI Template Guide:

Ethical AI Template and Recommendations

Step 1: go to medical AI

Medical AI 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, etc?

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 it biased?

What were the results of this model? Report using the standard methods described below. Focus on the confusion matrix, recall, precision, and accuracy.

How does this model compare to other non-algorithmic assessments and existing algorithms? Does this model demonstrate improvement compared to them?

Is this a viable method? Is this model a replacement for humans or a supplement? How would this be used as a supplement when working with human input?

Standardizing Terminology - for experts as well as novices. These all must be reported at the top of the paper to give a clear understanding of the results.

True Positive (TP): This is an outcome where the model correctly predicts the positive class.

False Positive (FP): Also known as a Type I error, this is an outcome where the model incorrectly predicts the positive class.

True Negative (TN): This is an outcome where the model correctly predicts the negative class.

False Negative (FN): Also known as a Type II error, this is an outcome where the model incorrectly predicts the negative class.

Confusion Matrix: This is used to organize and display the TP, FP, TN, and FN. This is a 2x2 grid with TP on the top left, FP on the top right, FN on the bottom left, and TN on the bottom right.

TP	
FN	

Accuracy: This is the proportion of true results (both true positives and true negatives) among the total number of cases examined. It's calculated as:

$$\text{Accuracy} = (\text{True Positives} + \text{True Negatives}) / \text{Total Predictions}$$

Precision: Also known as positive predictive value, this metric is the ratio of true positives to the sum of true and false positives. It's a measure of a classifier's ability to correctly identify positive cases.

$$\text{Precision} = \text{True Positives} / (\text{True Positives} + \text{False Positives})$$

Recall: Also known as sensitivity, this metric is the ratio of true positives to the sum of true positives and false negatives. It's a measure of a classifier's ability to correctly identify all positive cases.

$$\text{Recall} = \text{True Positives} / (\text{True Positives} + \text{False Negatives})$$

[Download This Template](#)

Step 2: download the template

Brian Bates

Step 3: fill out the template

Medical ML Model Template:	
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, a Decision Tree, Random Forest, Gradient Boosting, or something else? What is the 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?	
What were the results of this model? Report using the standard methods described below. Focus on the confusion matrix, recall, precision, and accuracy to create a standardized explanation.	
How does this model compare to other nonalgorithmic assessments and existing algorithms? Does this model demonstrate improvement compared to humans and other models?	
Is this a viable method? Is this model a replacement for humans or a supplement? How would this be used as a supplement when with human intervention? Should it be reported with and without human intervention?	

Step 4: add this to the top of your reports

AI Assistant Guide:

Home Services Pupil Distortions Book Medical AI Checkout Cart \$9.99 1 Item

INSTRUCTIONS

Contact Us

Frequently Answered Questions (FAQ)

Need additional information or have a question or comment? Please leave a message and someone from our team will contact you.

Fields marked with an * are required

Name *

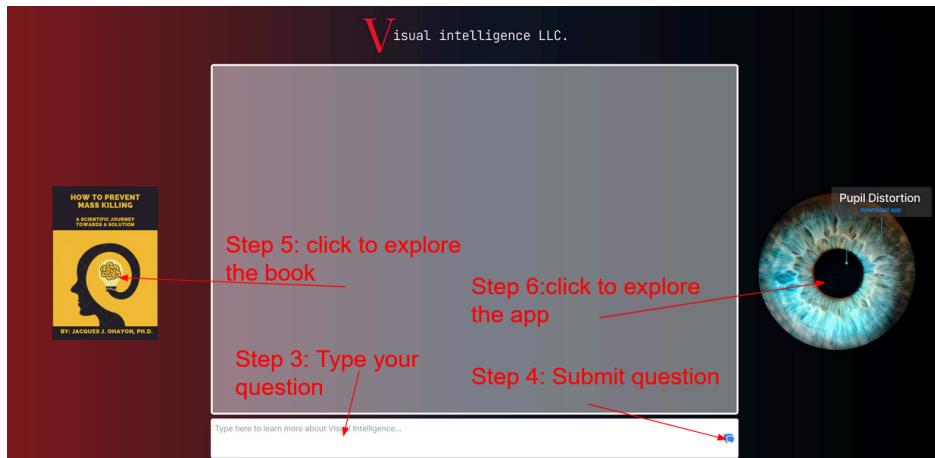
Email *

Message *

Sign Up for our newsletter to receive news and exclusive content about the innovations for the treatment of depression

More Questions? Click [here](#) to interact with our Visual Intelligence Virtual Assistant!

Brian Bates



Chapter 6: Evaluation and Conclusion

6.1 Verification and Validation

Throughout this project we had multiple verification periods to ensure that our website functioned as intended. During these specific periods we would test the site to ensure that everything was functioning correctly. Furthermore, during our weekly meetings with our sponsor we would ensure that everything put onto the website was up to the standards of our sponsor. This allowed us to make sure that anything that was going onto the website was verified before implementing it on the site. Lastly, we wanted to validate all plugins being used on the website. Before updating each plugin we made sure to backup the site incase of the possibility that the site might break due to a new version of the plugins we were using.

The first test of our solutions that were being made to the website we made sure to check all forms of access to the website. This was done by using different browsers, mobile devices, and checking the dashboard from the hosting site GoDaddy.com.

The second test that was needed was to ensure the validity of information that transferred from the staging site to the live site. We did this by making sure that each individual team

Brian Bates/Kevin Busseno

member validated the information transferred over to the live site correctly. We created a check list so that we could guarantee that all the information was correct. Finally, we made sure that our Sponsor was happy with the results on his live site and that everything was added from the final deployment.

The third test was ensuring that we backed-up each site before transferring the data from staging to live. This test was to ensure that no information would be lost if this process happened to corrupt. After downloading the backup of each site we made sure to upload the sites locally to ensure that the backups would work in the case of a corrupted site. Furthermore, we made sure to have each website schedule a backup each week to ensure that data recovery was possible each week.

The final test was to ensure that the E-Commerce portion of the site worked properly. We used WooCommerce to create the ability for our sponsor to sell his product directly to consumers from the site. We test by using the “testing mode” that WooCommerce has which essentially uses a fake credit card to go through the transaction processes. After this was done we made sure that the receipt as well as the billing information was sent to the correct email address. We also needed to verify that all of the information was correctly sent to the database about the purchase. We ensured that by going into the WooCommerce plugin and validating that all the information is stored correctly.

6.2 Requirements & Prototype

Throughout the Capstone project our solutions met and exceeded our sponsors goals. Our outline was to create a constant contact form, guidelines for AI being used in the medical industry, create a way to sell the product directly from the website, create an AI chat bot for frequently asked questions and fix anything broken or outdated on the website.

Kevin Busseno

Our solution prototype is fully functional and performs all of these intended tasks. Our prototype works on all browsers and mobile devices. We are extremely happy with the work we have accomplished this semester and also made it scalable for the future employees or students that work on the website.

6.3 Obstacles & Lessons Learned

Throughout this project we went through many obstacles and lessons learned. We went through multiple iterations of problem solving to find the best solutions for the problems that our sponsors had. We learned a lot about teamwork and understanding that we all played a crucial part in solving these problems. We created a team environment that strived on helping each other and holding each other accountable for the tasks they were assigned. We each learned a lot about Wordpress and the possibilities that come with building a website using it. This is something that most of the team didn't have previous knowledge on. We found this to be an obstacle but solved this by making sure to share all experiences with team members to allow the learning processes of Wordpress easier for everyone. Learning about how to sell a product on Wordpress was also a valuable experience. Understanding this allowed us to save our sponsor money on selling his product through a 3rd party application. We also learned about scalability due to this capstone project. We made sure that in each of our processes we added an ability to scale the projects for the future. This was done by ensuring correct documentation was taken and resources were allocated correctly.

6.4 Team Reflections

We have included some words from our group about key takeaways we each had from our Capstone Experience:

Kevin Busseno

Kevin Busseno - “This project has given me valuable insight into Wordpress, plugins, website development, teamwork, and industry standards. I learned how to manage and test Wordpress websites as well as the ability to sell products. This project has given me valuable knowledge and experience to further my career as a website developer. Furthermore, it gave me insight into what to expect for the future of my career.”

Alianna Panganiban: “I was able to apply my knowledge on web design in order to enhance user interaction with the site. I learned how to implement those ideas through Wordpress and in creating a newsletter on Constant Contact. I want to build upon my skills on website development in order for a company to communicate effectively with those who are interested.”

Brian Bates: “This project allowed me to expand my knowledge in web development and AI standards. This project taught me how to use WordPress for the first time and how their website design works. This experience taught me how to create a way to create a clean and friendly user experience on the medical AI page. This medical AI also taught me how to research computer science topics and critically think and explain them to create industry standards.”

Norsang Nyandak - “This was exactly what I needed—an industrial experience that pushed me deeper into the realms of the unknown and the uncomfortable. It spanned learning new tech stacks to enhance my soft skills. Truly, greatness is shaped by the tasks we dread yet must undertake.”

Stephanie McCarten: “This experience was an excellent example of what working in a real world setting might entail. It taught me so much about organization, collaboration, and working in a set timeframe to deliver a complete working product. It also taught me how to interpret requests and requirements given in a non technical manner and transform those into something that can be implemented with software and development. I will always remember what I learned

Kevin Busseno

here and hopefully use those skills throughout my career. I'm so grateful that I had such intelligent, capable, kind teammates by my side through all of it."

Kevin Busseno