

AUTOMATING OSINT USING AI AGENTS

Automating OSINT using AI agents

Chase E Hanson

Western Governors University

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A. Proposal Overview

A.1 Problem Summary

CT Cyber Team Consulting is an offensive cybersecurity consulting firm that is facing challenges regarding efficiency of its operations. In today's cyber security landscape, CT's red team spends the majority of its time conducting passive reconnaissance. Passive Recon includes activities such as physical site surveys, Open-Source Intelligence (OSINT), and any other information gathering on a target without actually interacting with the target. While these activities are certainly crucial to our red team engagements they can be extremely time consuming and can potentially bottleneck our engagements. This proposed project will greatly reduce the amount of time it takes our red team to perform engagements with minimal cost and overhead. The project will achieve this by leveraging AI agents to assist our red team in performing OSINT activities.

A.2 IT Solution

Provide details about the IT Solution. Be specific and concrete about what you will do.

Explain why this solution addresses the problem in A1.

A.3 Implementation Plan

This section should contain the details of an implementation plan. First, provide details on the different phases (if applicable). Then, explain how the project will be carried out and why it will be carried out in that manner. Next, discuss the plan for implementing the project. Finally, explain why this implementation plan is appropriate for your IT Solution in A2.

B. Review of Other Works and B.1 Relation of Artifacts to Project Development

This section reviews works done by a third party relevant and related to your project. Review at least *four* other works relating to your topic. Summarize (in satisfaction of B) online articles, videos, interviews, white papers, case studies etc., produced by industry professionals, and relate (in satisfaction of B1) each work to the proposed development of the project.

- Any citable work produced by an industry professional is acceptable, e.g., whitepaper, online articles, manuals, videos, etc.

- The work only needs to relate to an aspect of your project, e.g., applied technology, a methodology used, risks, benefits, costs, etc.
- 4 to 5 details from each source is a good rule of thumb to ensure your summary provides enough detail.

Review of work 1

Start with an overview of the article, including the work's title and an in-text citation, and summarize the major points discussed. Describe how the work relates to the proposed development of the project (in fulfillment of part B1).

Review of work 2

Start with an overview of the article, including the work's title and an in-text citation, and summarize the major points discussed. Describe how the work relates to the proposed development of the project (in fulfillment of part B1).

Review of work 3

Start with an overview of the article, including the work's title and an in-text citation, and summarize the major points discussed. Describe how the work relates to the proposed development of the project (in fulfillment of part B1).

Review of work 4

Start with an overview of the article, including the work's title and an in-text citation, and summarize the major points discussed. Describe how the work relates to the proposed development of the project (in fulfillment of part B1).

C. Project Rationale

Summaries should include the rationale for choosing this project, including what makes this problem interesting or significant. The Project Rationale section (*suggested length of 1–2 pages*) provides a rationale for the project. It should address the reasons for implementing the project, as described in the Proposal Overview. The rationale may include and expand on business and technical reasons to support the implementation. Justify the selection of the project. Tell the reader what could happen if this implementation doesn't take place.

D. Current Project Environment

This section (*suggested length of 2–3 pages*) describes and details the current project environment. It should also address specifically how the current state will set the direction for the definition and implementation of the proposed solution. Include other details that support the description as needed to support and briefly define the project environment. Analyze the systems and describe the status of the project environment before the project begins. Tell the reader what difficulties exist and provide examples. **Explain how your solution aligns with the Company's culture and strategy.** (e.g., *Because the network has significant bandwidth issues, accessing resources can be a problem. The accounting department depends on a report that should take 5 minutes to run and be emailed to stakeholders. However, this report takes 30 minutes on average and often interruptions cause the report to fail.*)

E. Methodology

This section (*suggested length of 1–2 pages*) describes the specific methodology. The methodology is the process that the project will follow when implemented. Define the methodology

and list its phases. In a paragraph per phase, tell the reader which specific tasks and deliverables will be executed/created during that phase. Look to section F for specific deliverables if you are unsure of what to write here.

F. Project Goals, Objectives, and Deliverables

In Project Goals, Objectives, and Deliverables (*suggested length of 3–5 pages*), provide a detailed explanation of the goals and objectives for the project and explain what the project will provide. There should be a specific identification of each goal and objective and a clear and logical description with adequate detail. Address and explain the criteria used to measure the objectives to demonstrate how each goal and objective is measured. The project will include a formal report. In addition, it will likely have a technical IT product, a user's manual, or other documentation. Deliverables should provide a detailed logical explanation of the project to substantiate the work and completion. Include the following in the description:

A minimum of one goal with two objectives is required. Each objective must have at least 1 deliverable.

F1. Goals, Objectives, and Deliverables Table

Every project has one or more goals. Each goal is supported by at least one project objective. Each objective is enabled by at least one project deliverable. Fill out this or a similarly organized table:

| | Goal | Supporting objectives | Deliverables enabling the project objectives |
|---|---------------|--------------------------------------|--|
| 1 | Test Category | 1.a. Test Objective 1. | 1.a.i. Explain project deliverable 1.a.i |
| | | | 1.a.ii. Explain project deliverable 1.a.ii |
| | | | ... |
| | | 1.b. Describe project objective 1.b. | 1.b.i. Explain project deliverable 1.b.i |
| | | | 1.b.ii. Explain project deliverable 1.b.ii |
| | | | ... |

| | | | |
|-----|--------------------------|--------------------------------------|--|
| | | ... | ... |
| | | | ... |
| | | | ... |
| 2 | Summarize project goal 2 | 2.a. Describe project objective 2.a. | 2.a.i. Explain project deliverable 2.a.i |
| | | | 2.a.ii. Explain project deliverable 2.a.ii |
| | | | ... |
| | | 2.b. Describe project objective 2.b. | 2.b.i. Explain project deliverable 2.b.i |
| | | | 2.b.ii. Explain project deliverable 2.b.ii |
| | | | ... |
| | | ... | ... |
| | | | ... |
| | | | ... |
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| | | ... | ... |

F.2 Goals, Objectives, and Deliverables Descriptions

Describe each of the project goals. Describe each objective. Explain how the objectives support the goals and explain how the objectives will be achieved. Explain what types of deliverables the project will provide, and describe the project deliverables expected by the end of the project. Finally, define the goals, objectives, and deliverables that align with the Goals, Objectives, and Deliverables Table.

G. Project Timeline with Milestones

This section (suggested length of 1–2 pages) provides a projected timeline with milestones for the project. These may be estimates that will most likely be adjusted, as the project will often require adjustments during the development and implementation phases.

Include a table (as below) with projected milestones, duration, start, and end dates. Projections should be as authentic as possible without regard to academic plans. Dates from task 2 must be in

the future based on the date you submit it. Recommendation: Set the year of the date one year in the future.

| Milestone or deliverable | Duration (hours or days) | Projected start date | Projected end date |
|--------------------------|--------------------------|----------------------|--------------------|
| | | | |
| | | | |

H. Outcome

This section describes the anticipated project outcomes and explains how the project's success will be measured once completed. First, provide a concluding summary of what the project entails and how it will be implemented. Second, explain how this will impact the business functions. Think of what was written in Current Project Environment and contrast it with how the implementation will correct the problem. Third, describe how you'll know the project is successful. Provide a metric, how you'll test for the metric and what goal you're aiming to achieve. Please see the task breakdown for examples.

I. References

- List all the outside sources that the narrative refers to in the text.
- Only list references with matching in-text citations.
- Sources and grammar are the most common reasons for rejected submission.
 - Evaluators use [grammarly.com](https://www.grammarly.com). The free side of gramamrly.com has been sufficient for this project.
 - We recommend using [MS Word's 'reference' feature](#) to manage citations and your reference page. Use this [APA Quick Reference](#), follow the style of this [Task 2 Proposal Example](#), and these formatting guidelines:
 - For *B. Other Works* have at least **four different** works referenced using in-text citations.
 - For every reference listed, have at least one in-text citation in APA style.
 - Use consistent formatting.
 - Use hanging Indent.
 - Right-click to remove hyperlinks.
 - Get the best writing help from the writing experts: [WGU Writing Center](#). You can set up an appointment or send them your document for review and suggestions.

Example:

Smyth, A. M., Parker, A. L., & Pease, D. L. (2002). A study of enjoyment of peas. *Journal of Abnormal Eating*, 8(3), 120-125. Retrieved from <http://www.articlehomepage.com/full/url/>

Bernstein, M. (2002). 10 tips on writing the living Web. *A List Apart: For People Who Make Websites*, 149. Retrieved from <http://www.alistapart.com/articles/writeliving>

Bell, T., & Phillips, T. (2008, May 6). A solar flare. *Science @ NASA Podcast*. Podcast retrieved from <http://science.nasa.gov/podcast.htm>