

View results

Respondent

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Aaditya Voruganti

12:45

Time to complete

1. Date of this semester progress report submission *

16th may 2025

2. Name of project exactly as it was listed in your award letter *

SegBin

3. Date of original award letter *

February 17, 2024

4. Date of expiration listed on award letter (or on scope change approval if more recent) *

02/15/2026

5. What is your project's 6 digit fund account number created for this project and to which the SSC allocation was transferred?

Please ask your project's financial contact for this information if unknown.

6. How much was your award (i.e., original award plus any approved budget increases)? *

3186.14

7. How much of your award has been spent to date (in dollars)? *

0

8. Date of forecasted project completion *

1 May 2026

9. Have you submitted one or more semester progress reports previously? *

☐ YES

☒ NO

10. Describe, in detail, what has been completed on the project since the last semester progress report (or since the project commenced if you have not yet submitted a semester progress report)? *

Since project initiation, the following milestones have been completed:

- Project Planning: Defined system goals, scoped requirements, and outlined a development roadmap.
- System Design: Completed hardware and software architecture, including sensor layout, object classification logic, and integration plans.
- Use Case Study: Identified target environments (e.g., campuses, offices), mapped user flows, and estimated environmental impact through simulated waste sorting scenarios.

Although the implementation phase has not yet begun, this was due to family-related challenges during the past semester. These issues have since been resolved, and work will resume with a focus on prototyping and testing in the upcoming term.

11. Describe, in detail, the project's challenges/obstacles since your last semester progress report (or since the project commenced if you have not yet submitted a semester progress report)? *

Since the project began, several obstacles have impacted progress:

Personal Time Constraints: A family issue during the past semester significantly limited my ability to begin implementation, delaying the transition from design to development.

Hardware Procurement Delays: Limited funding and supply chain issues made it difficult to source key components needed for prototyping.

Dataset Limitations: Finding or creating a high-quality, labeled dataset for waste classification has proven challenging, slowing progress on the machine learning model.

12. Describe, in detail, the project's successes since your last semester progress report (or since the project commenced if you have not yet submitted a semester progress report)? *

Since the project began, several key milestones have been successfully completed:

Comprehensive Project Planning: Defined clear goals, user requirements, and a structured development roadmap.

System Design Completion: Finalized the hardware and software architecture, including sensor selection, AI model integration plans, and cloud connectivity.

Use Case Study: Conducted a detailed analysis of real-world applications, identifying primary deployment environments and validating the system's potential impact.

13. Did your project have any changes to its team that SSC should know about (e.g., project lead, faculty/staff advisor, departmental financial contact)? *

NOTE: If yes, please complete the SSC Project Contact Information Change Form located at this link: <https://forms.office.com/r/uBjx9nmNpG>

☐ YES

☒ NO

14. Complete and upload the semester financial documentation for your project. You should reflect all expenditures since your last semester project report. **We strongly suggest that you also upload supporting financial transaction reports from Banner for your award CFOP. Talk to your project's financial advisor for more information on generating this report.**

<https://studentengagement.illinois.edu/sites/default/files/2024-09/SSC-Budget-Timeline-SEMESTER-PROGRESS-REPORT-template.xlsx>

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NOTE: When your project is completed and/or expired (whichever comes first), any remaining project funds will be transferred back to the SSC.

 [SSC-Budget-Timeline-SEMESTER-PROGRESS-REPORT- Aaditya Voruganti.xlsx](#)

15. (OPTIONAL FOR SEMESTER REPORT) Upload project marketing and/or media not previously submitted in semester progress reports.

NOTE: Project marketing and/or media must include SSC's logo and/or a statement of which fee(s) funded the project.