



**Student Sustainability Committee**  
**Funding Award Letter**



11/11/2025

**Project:** Automated Waste Sorting via Computer Vision & Robotics: A Feasibility Study

Nishant Garg,

The University of Illinois at Urbana-Champaign Student Sustainability Committee (SSC) is pleased to inform you that your project has received approval from the Institute for Sustainability, Energy, and Environment (iSEE), and the Vice Chancellor for Student Affairs.

The Student Sustainability Committee is proud to award **\$181,000.00** in grant funding for **Automated Waste Sorting via Computer Vision & Robotics: A Feasibility Study**.

In order to remain eligible for this award, you agree to the following conditions:

1. This award is active for a period of **two (2) years** from the date of the fully authorized award letter or as otherwise indicated in this award letter. The Project Lead is the individual responsible for all official communication and the execution of this agreement. It is expected that this Funding Award Letter will be authorized expeditiously and that the project will be completed within these two (2) years.
2. The project's Financial Contact must submit the prescribed Banner Fund, Program, Index (FPI) Code Request Form to the University Accounting and Financial Reporting (UAFR) for the assignment of a Chart, Fund, Organization, and Program code (CFOP) **within four weeks** of receipt of this letter. The CFOP established for this award shall strictly be used to award the funds for this proposal and SSC-approved project-related transactions. All institutional accounting rules are applicable, including deficits being prohibited for SSC award-related CFOPs.
3. A progress report and a detailed list of expenditures must be provided by the end of each semester during which the award is active. The link to the on-line **SSC Semester Progress Report** can be found on our website. All progress reports will be available to the public via the SSC's Illinois Climate Action Plan (iCAP) project portal.
4. A final report of all work completed, a full list of expenditures, and a detailed sustainability impact report must be provided to the SSC by **11/17/2027** or by project completion, whichever comes first. The link to the on-line **SSC Final Project Report** can be found on our website. The SSC reserves the right to rescind all remaining funds after project is completed or after project is expired, whichever comes first. The final project report will be available to the public via the SSC's Illinois Climate Action Plan (iCAP) project portal.
5. Any substantial modifications to the project, including alterations to the project budget, timeline, and/or direction, must be submitted via a scope change application form at least **two (2) months** before the project's expiration date. A majority vote is required to approve scope changes. The link to the on-line **SSC Scope Change Application** can be found on the SSC website.
6. Should there be a need for a change to the Project Lead or other project team members including the Faculty/Staff Advisor and/or the Project's Financial Contact, a contact information change request

form must be submitted. The link to the on-line **SSC Contact Information Change Request Form** can be found on our website.

7. Equipment purchased with SSC funds is considered property of the university. The sponsoring department is responsible for all equipment purchased with SSC funds. Equipment should be inventoried according to institutional procedures and should be returned to the department, as applicable, when not in use by the project team.
8. Marketing or educational/promotional material including but not limited to advertising, signs, digital ads, press releases, or other media involving the project or events related to this project must include SSC's logo and/or a statement of which fee funded the project. The project team must coordinate with SSC to ensure promotion appropriately highlights the SSC's contributions to the project.
9. The project is required to abide by all applicable institutional policies and procedures as well as applicable local, state, and federal laws.
10. SSC reserves the right to revoke funding if the project does not comply with the terms and conditions outlined in this letter.

**Project Name:** Automated Waste Sorting via Computer Vision & Robotics: A Feasibility Study

**Funding Source:** SCEF/303692

**Funding Requested:** \$181,000.00

**Funding Allocated:** \$181,000.00

**Project Lead, Dept., and Email:** Nishant Garg, CEE, nishantg@illinois.edu

**Unit Financial Contact, Dept., and Email:** Griffin Knight, CEE, gknight@illinois.edu

**Project Category:** Food & Waste

**Project Description:**

Campus waste facilities process nearly 7,850 tons of material each year but achieve low diversion rates (19% in 2025), falling short of the Illinois Climate Action Plan (iCAP) Zero Waste goals. To address this challenge, our team installed cameras at the Waste Transfer Station and developed an initial AI model for real-time waste classification. While the prototype delivered promising results, it was trained on a limited dataset and constrained by single-camera coverage. Building on this foundation, the proposed project will expand the dataset (~2,000 to >10,000 labeled images) and integrate multiple cameras and weight sensors for real-time accuracy. In parallel, a robotics feasibility study will establish the foundation for future automation in waste sorting, contributing towards achieving iCAP goals.

**This proposal directly funds the following. See approved budget for details.**

1. Robot
2. Hourly material testing
3. Publication costs
4. Graduate and undergraduate wages
5. F&S wages for support of conveyor belt operations

## Funding Approval

Student Sustainability Committee, Chairperson

Ellen Cha

Name



Signature

11/13/2025

Date

Institute for Sustainability, Energy and Environment, Director

Jennifer Fraterrigo

Name



Signature

11/13/2025

Date

Vice Chancellor for Student Affairs

Domonic Cobb

Name



Signature

11/14/2025

Date

## Funding Acknowledgement

By signing below, I agree to the terms and conditions for this award. If you have any questions regarding these requirements, please contact the Student Sustainability Committee Advisor at [ssc-advisor@illinois.edu](mailto:ssc-advisor@illinois.edu).

Award Recipient

Nishant Garg

Name



Signature

11/14/2025

Date

# FALL 2025\_SSC AWARD\_AUTOWASTE SORTING\_GARG

Final Audit Report

2025-11-14

Created:	2025-11-11 (Central Standard Time)
By:	Sheri Glowinski (sherig@illinois.edu)
Status:	Signed
Transaction ID:	CBJCHBCAABAA4ilqeCZascVYY6xj2P23I2KKw3hx79xZ
Number of Documents:	1
Document page count:	3
Number of supporting files:	0
Supporting files page count:	0

## "FALL 2025\_SSC AWARD\_AUTOWASTE SORTING\_GARG" History

-  Document created by Sheri Glowinski (sherig@illinois.edu)  
2025-11-11 - 5:38:12 PM CST- IP address: 192.17.6.251
-  Document emailed to Ellen Cha (ellenc3@illinois.edu) for signature  
2025-11-11 - 5:38:41 PM CST
-  Reminder sent to Ellen Cha (ellenc3@illinois.edu)  
2025-11-12 - 5:44:24 PM CST
-  Email viewed by Ellen Cha (ellenc3@illinois.edu)  
2025-11-13 - 11:12:10 AM CST- IP address: 130.126.255.102
-  Ellen Cha (ellenc3@illinois.edu) authenticated with Adobe Acrobat Sign.  
2025-11-13 - 11:12:28 AM CST
-  Agreement viewed by Ellen Cha (ellenc3@illinois.edu)  
2025-11-13 - 11:12:29 AM CST- IP address: 130.126.255.102
-  Document e-signed by Ellen Cha (ellenc3@illinois.edu)  
Signature Date: 2025-11-13 - 11:12:45 AM CST - Time Source: server- IP address: 130.126.255.102
-  Document emailed to Jennifer Fraterrigo (jmf@illinois.edu) for signature  
2025-11-13 - 11:12:47 AM CST



-  Agreement viewed by Jennifer Fraterrigo (jmf@illinois.edu)  
2025-11-13 - 5:54:54 PM CST- IP address: 128.174.178.75
-  Jennifer Fraterrigo (jmf@illinois.edu) authenticated with Adobe Acrobat Sign.  
2025-11-13 - 5:55:29 PM CST
-  Document e-signed by Jennifer Fraterrigo (jmf@illinois.edu)  
Signature Date: 2025-11-13 - 5:55:29 PM CST - Time Source: server- IP address: 128.174.178.75
-  Document emailed to Domonic Cobb (dcobb@illinois.edu) for signature  
2025-11-13 - 5:55:31 PM CST
-  Email viewed by Domonic Cobb (dcobb@illinois.edu)  
2025-11-14 - 0:04:24 AM CST- IP address: 172.225.20.49
-  Agreement viewed by Domonic Cobb (dcobb@illinois.edu)  
2025-11-14 - 5:03:26 PM CST- IP address: 130.126.255.35
-  Domonic Cobb (dcobb@illinois.edu) authenticated with Adobe Acrobat Sign.  
2025-11-14 - 5:05:45 PM CST
-  Document e-signed by Domonic Cobb (dcobb@illinois.edu)  
Signature Date: 2025-11-14 - 5:05:45 PM CST - Time Source: server- IP address: 130.126.255.35
-  Document emailed to Nishant Garg (nishantg@illinois.edu) for signature  
2025-11-14 - 5:05:47 PM CST
-  Email viewed by Nishant Garg (nishantg@illinois.edu)  
2025-11-14 - 6:15:22 PM CST- IP address: 199.184.122.7
-  Nishant Garg (nishantg@illinois.edu) authenticated with Adobe Acrobat Sign.  
2025-11-14 - 6:16:31 PM CST
-  Agreement viewed by Nishant Garg (nishantg@illinois.edu)  
2025-11-14 - 6:16:32 PM CST- IP address: 199.184.122.7
-  Document e-signed by Nishant Garg (nishantg@illinois.edu)  
Signature Date: 2025-11-14 - 6:19:02 PM CST - Time Source: server- IP address: 199.184.122.7
-  Agreement completed.  
2025-11-14 - 6:19:02 PM CST

