ISU 2026 Symposium

Exploring Learning Environments for Student Use of Artificial Intelligence: Student Organizations

School of IT

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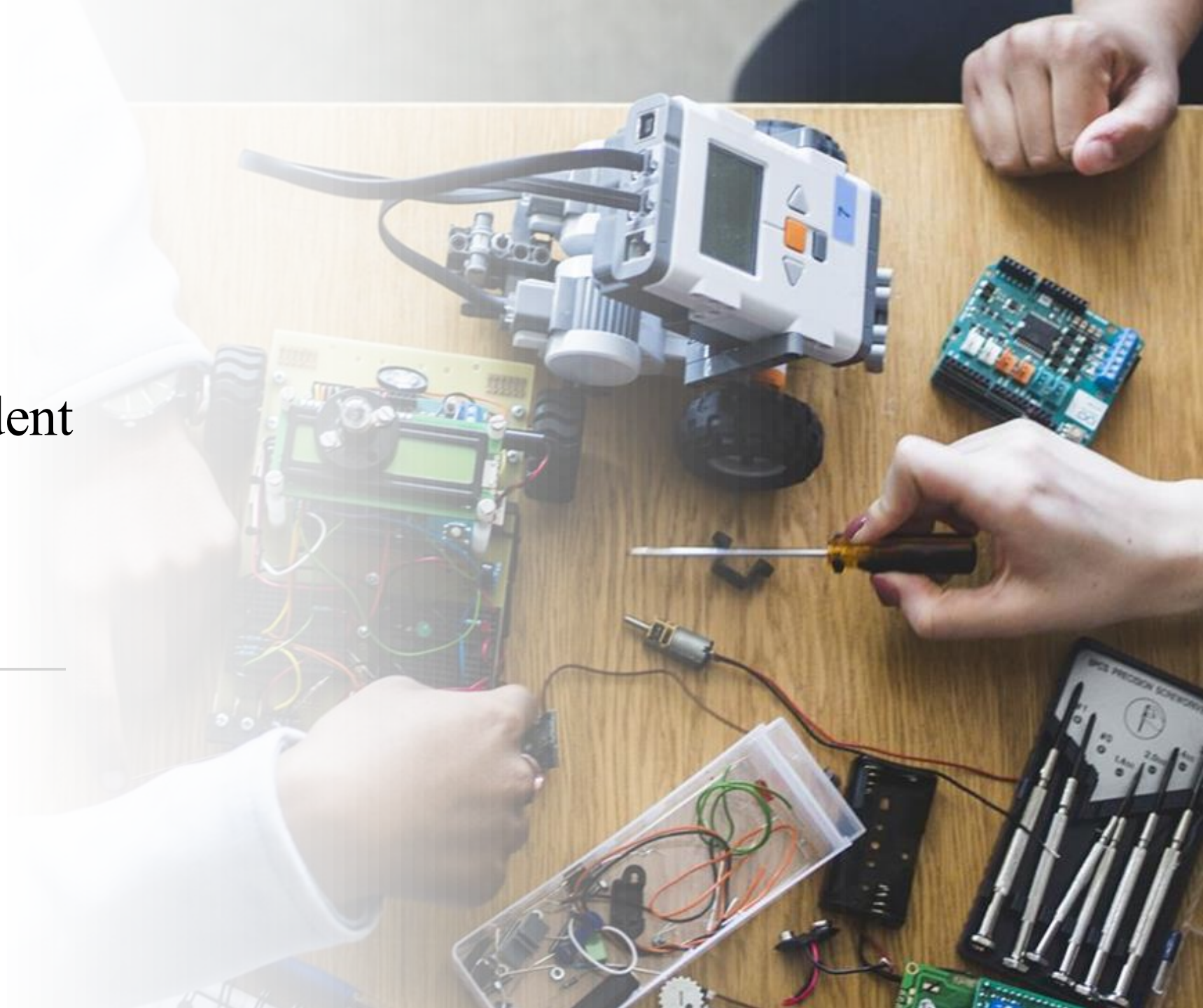
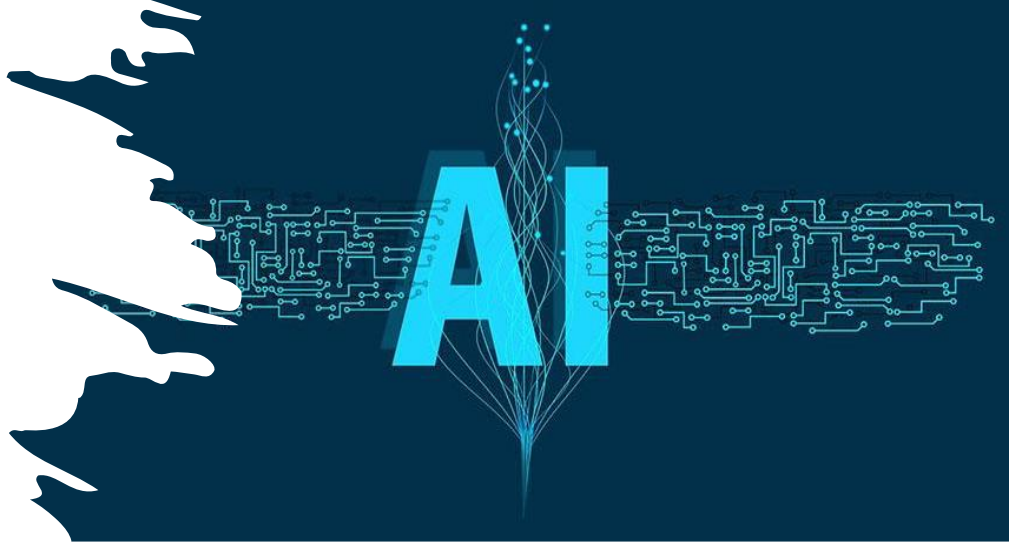


AGENDA



- **Introduction**
  - Student use of AI in Higher Education
  - Registered Student Organizations
- **Study** - Students using AI in RSOs
- **Research Questions**
- **Workshop Framework**
  - Creative Idea Generation
  - Technical Problem Solving
  - Data Visualization
  - Conceptual Explanation
- **Resource Requirements**
- **Ethical Guidelines**
- **Student Engagement Plan**
- **Survey**
- **Conclusion**
- **Q & A and Recruitment**

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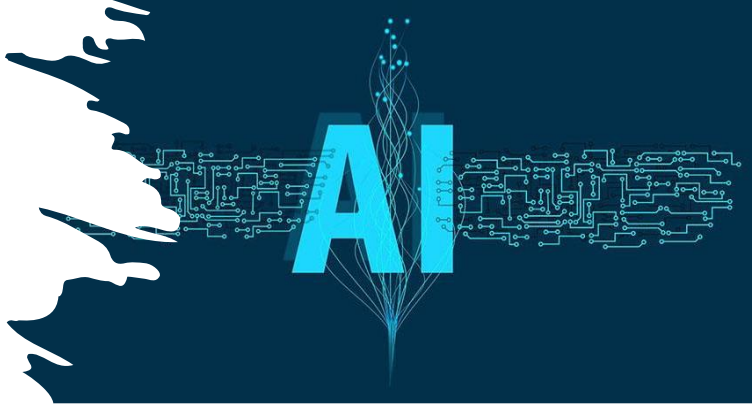
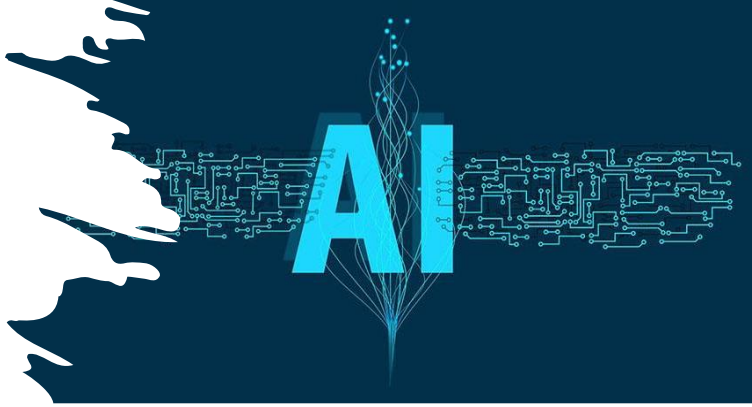
INTRODUCTION



- **Student use of AI in higher education**
  - One in three students had used a form of AI, such as essay-generating software, to complete their coursework 60% using the program on more than half of their assignments
  - 75% of students believe that using the program for cheating is wrong but still do it
  - 30% believe their professors are unaware of their use of the tool
  - 46% of students saying their professors or institutions have banned the tool for homework

(Intelligent.com, 2023)

- **Mixed messages to students**
  - AI will be used in the workplace
  - AI has many benefits
  - AI is banned from the classroom



- **Registered Student Organizations & Extracurricular Activities**
  - The higher education environment, marked by its extracurricular services, provides a risk-free context for students to participate in social innovation and entrepreneurship, free from the fear of real-world failure (Bodolica *et al*., 2021)
  - Extracurricular activities undoubtedly provide several benefits to students, who often perceive them as avenues of assistance across various dimensions (Ginosyan *et al*., 2020).
- **ISU Dean of Students Office**
  - 400 RSOs
- **ACM RSO (Association of Computing Machines)**
- **ACM students guide other RSO students with AI activities**

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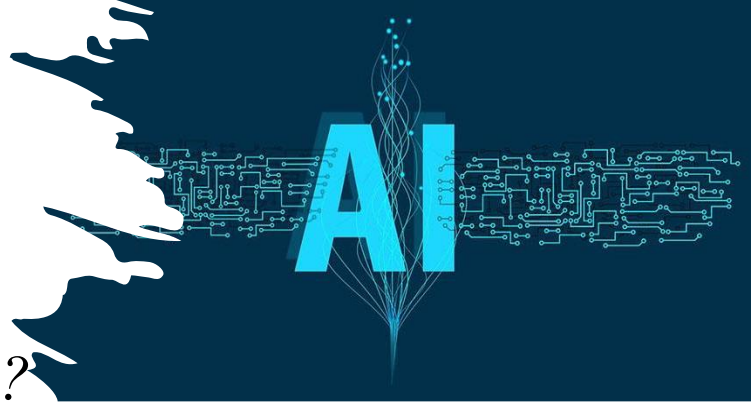
USING AI IN RSO's



- **Study**
  - *Does the use of AI in RSO's enhance their college experience?*
    - How do extracurricular activities contribute to improving students' academic performance in higher education institutions?
    - What is the effect of participation in extracurricular activities on the general experience of student within higher education institutions?
    - How can extracurricular activities enhance the academic reputation of higher education institutions?

      Nassar, F. S., Abbas, A. O., Al-Saify, H., & Ali, O. M. (2025). The impact of extracurricular activities on developing academic standing, student satisfaction, performance, and bolstering the academic reputation of higher education institutions from the perspective of SDGs. Journal of Lifestyle and SDGs Review

  - The most common academic research articles in the US on AI in higher education was on tutoring systems and improving student outcomes (Chu, H. C., Hwang, G. H., Tu, Y. F., & Yang, K. H. (2022))

Research information & questions

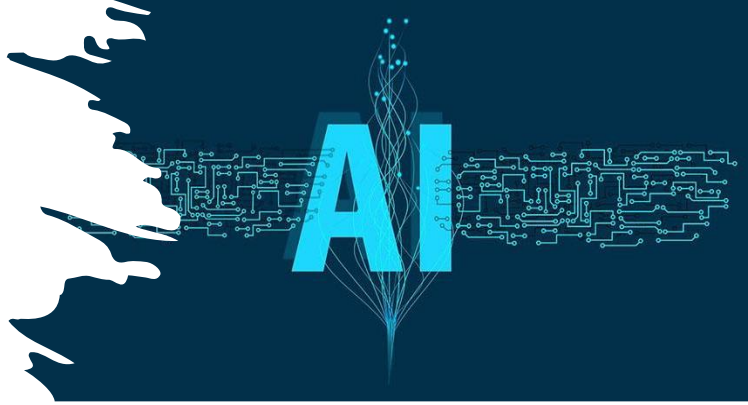
Adoption and Engagement	How do students perceive the use of AI tools in non-academic settings such as RSOs?
	What factors influence student willingness to engage with AI in extracurricular activities?
Experiential Learning Outcomes	Does integrating AI into RSO activities improve students' confidence and creativity in problem-solving?
	How does experiential AI learning through RSOs compare to traditional classroom-based AI education in terms of skill acquisition?
Ethical and Integrity Considerations	What ethical concerns do students associate with using AI in non-academic contexts?
	How effective are guidelines in maintaining a clear boundary between academic integrity and extracurricular AI use?

Research information & questions

Application-Specific Impact	Which AI applications (e.g., creative idea generation, technical debugging, data visualization) are most valued by students in RSOs?
	How does AI-assisted technical problem-solving influence project success rates in student organizations?
Resource and Implementation Feasibility	What resources are most critical for successful AI integration in RSOs?
	How scalable is the proposed framework across different types of student organizations?
Student Perception and Future Intent	Does exposure to AI in RSOs increase students' interest in pursuing AI?
	How do students' attitudes toward AI change after participating in RSO-based AI workshops?

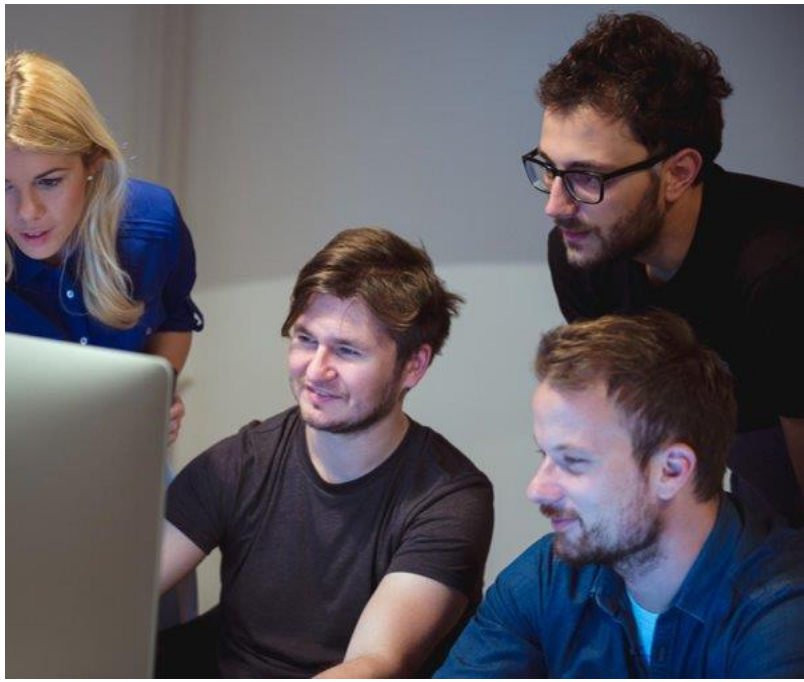
AI Workshop Framework for Student Organizations

Workshop Structure



Workshop Introduction

Workshops start with an introduction to AI fundamentals to set the foundation for learning.



Hands-on Activities

Hands-on tasks are tailored to RSOs' focus, such as coding for technical groups and design for creative groups.

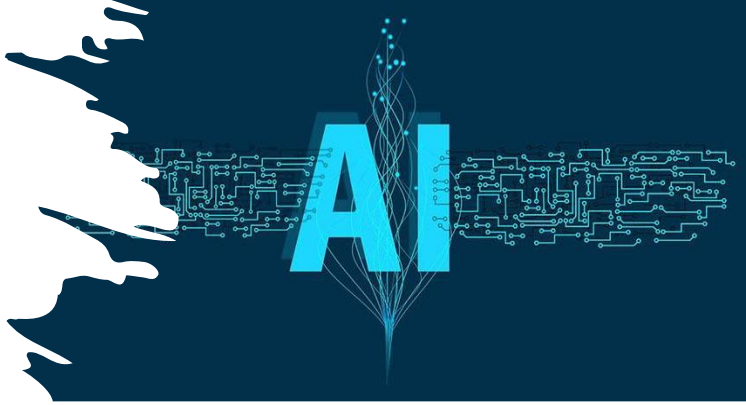
Collaborative Learning

Interactive demos, group tasks, and open discussions foster experiential learning and collaboration.

Facilitation and Duration

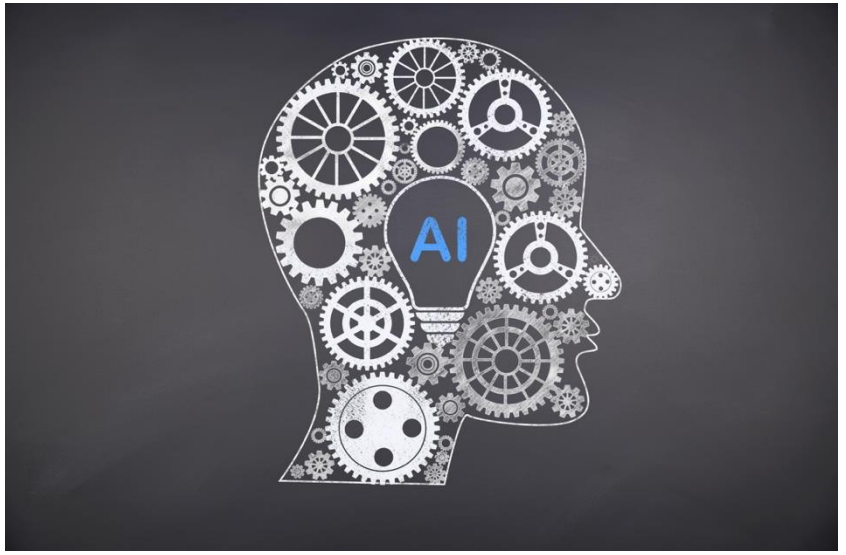
Workshops last 2–3 hours and are led by faculty advisors and student tech leaders for guidance.

Creative Idea Generation



AI in Brainstorming

AI platforms help generate innovative event themes and project concepts, enhancing brainstorming sessions.



Visual Content Creation

Image-generation AI tools assist in designing appealing posters and marketing materials effectively.

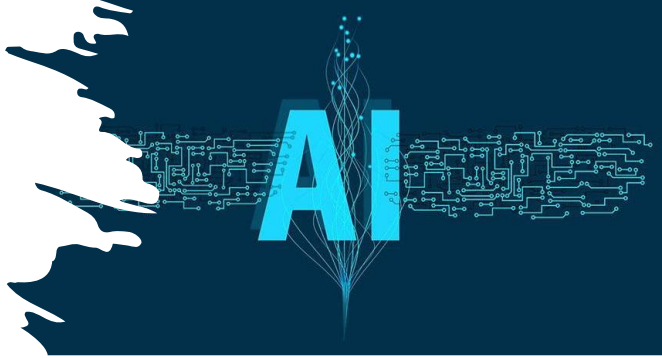
Collaborative Idea Refinement

Students experiment with AI outputs to compare, refine, and enhance ideas collaboratively.

Fostering Innovation Culture

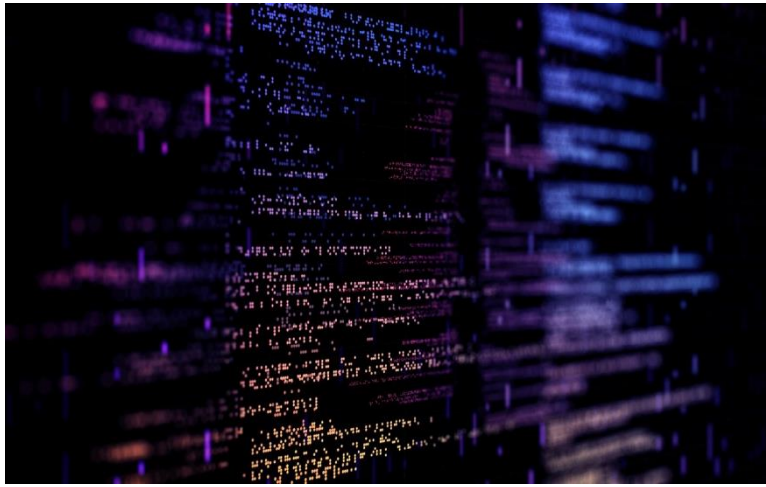
Integrating AI in creativity promotes innovation, adaptability, and practical learning among members.

Technical Problem Solving



AI-Assisted Debugging

AI tools provide real-time debugging support, reducing error resolution time and enhancing code quality.



AI-Driven Technical Support and Optimization

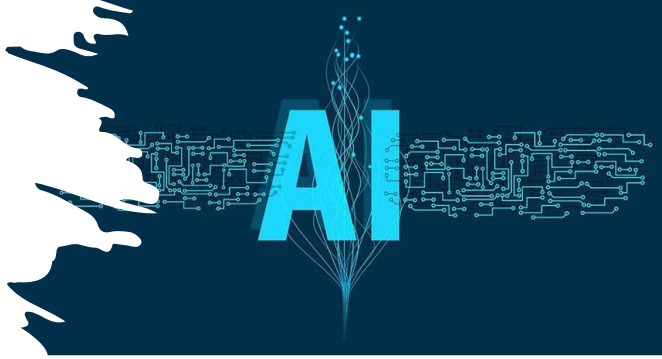
AI platforms provide intelligent suggestions and analytical insights that help solve complex technical challenges across a wide range of disciplines, not just programming.

Educational Benefits

AI explanations improve learning and build student confidence in problem-solving during collaborative projects.

Professional Preparation

Workshops using AI tools prepare students for future careers in AI-driven software development environments.



Data Visualization

AI Streamlines Data Analysis

AI tools help transform raw data into clear visuals, making complex information easier to understand.

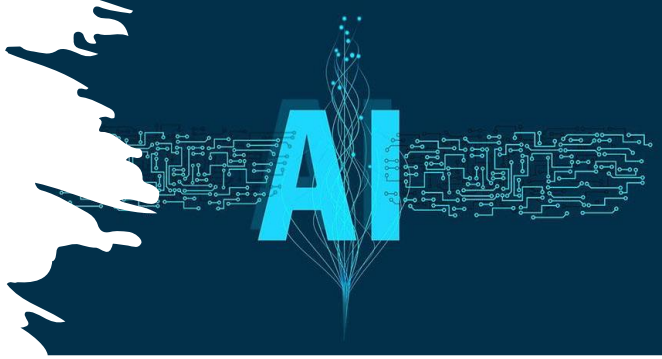
Insights for Decision Making

Visualized data enables quick identification of trends, patterns, and anomalies to support smart decisions.

Educational Workshops

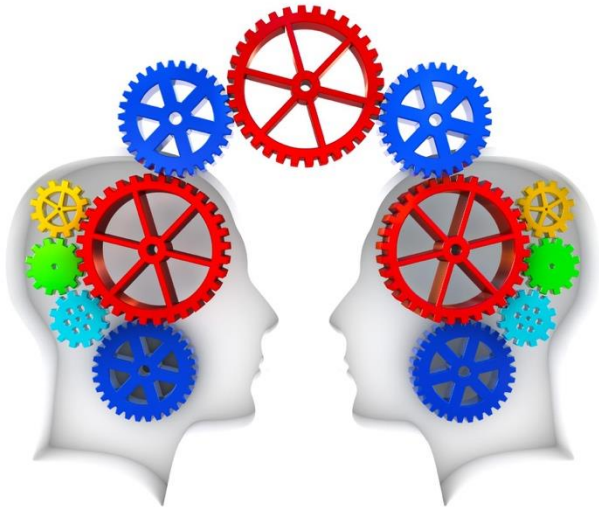
Data visualization exercises teach students how AI enhances analysis and communication of findings.

Conceptual Explanation



Simplifying Complex Topics

AI helps simplify technical concepts like algorithms and data structures for learners with varied expertise levels.



Inclusive Learning Environments

Using AI as a tutor fosters inclusive learning and encourages peer knowledge sharing in interdisciplinary groups.

Promoting Self-Directed Learning

AI enables students to independently query and clarify concepts outside formal sessions, enhancing self-directed learning.

Bridging Theory and Practice

Integrating AI in workshops deepens understanding by connecting theoretical concepts with practical applications.

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Resource Requirements

Essential Hardware

Laptops or desktops with reliable internet are critical for conducting effective AI workshops.

Software Resources

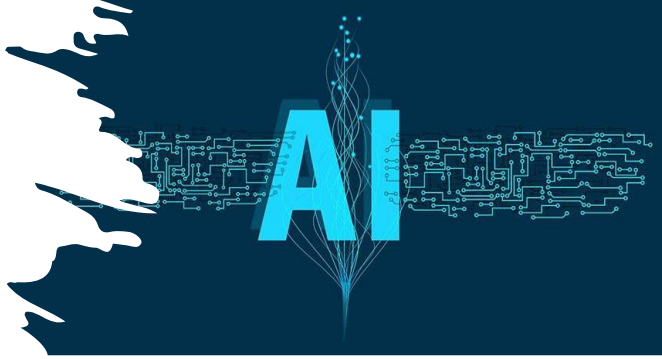
AI tools like ChatGPT, GitHub Copilot, and Tableau enable interactive learning and data visualization.

Human Resources

Faculty advisors oversee the workshops while student volunteers facilitate participant engagement.

Documentation and Training

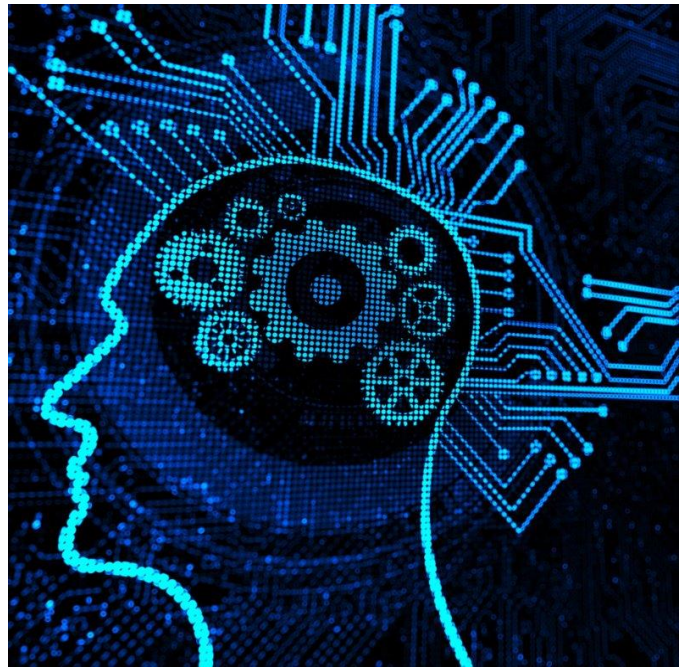
Clear guides and training materials help participants navigate AI applications confidently.



Ethical Guidelines

Separation of AI Applications

Clear distinction between AI use in extracurriculars and academic work prevents integrity violations.



Transparency and Disclosure

Participants must be informed about AI's role in generating outputs to maintain transparency.

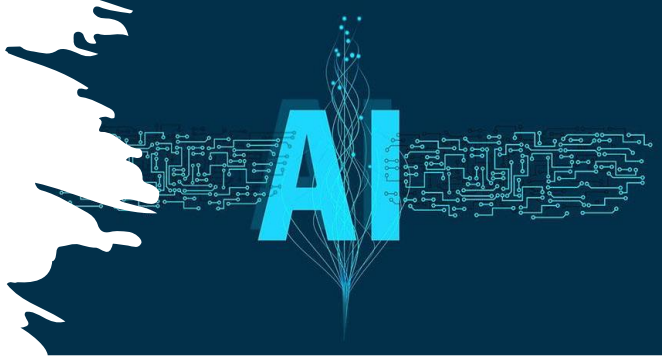
Data Privacy and IP Rights

Respecting data privacy and intellectual property rights is essential when using AI with sensitive information.

Critical Evaluation of AI Outputs

Encouraging critical analysis avoids over-reliance on automated AI-generated results.

Student Engagement Plan – Survey



Post-Workshop Feedback

Capture baseline knowledge, interest levels, and expectations about AI before the workshop begins.

Evaluate confidence, usefulness, and ethical concerns regarding AI after the workshop.

Data-Driven Improvements

Use survey results to customize and improve future workshops for different student organizations.

Experiential Learning Insights

Analyze how students adopt AI in informal settings, supporting research on technology acceptance.

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Survey on AI Integration in RSOs

Section 1: Demographics

1. What is your year of study?

[ ] Freshman [ ] Sophomore [ ] Junior [ ] Senior [ ] Graduate

2. What is your major/field of study?

_____

Section 2: Student Perceptions of AI in RSO

3. How familiar are you with AI tools?

[ ] Not familiar [ ] Slightly familiar [ ] Moderately familiar [ ] Very fami

4. I believe AI can enhance extracurricular activities.

Likert Scale: 1 (Strongly Disagree) – 5 (Strongly Agree)

Section 3: Experiential Learning Outcomes

5. Using AI in RSOs will improve my problem-solving skills.

Likert Scale: 1 – Strongly Disagree, 5 – Strongly Agree

6. AI workshops in RSOs will increase my confidence in using AI tool

Likert Scale: 1 – Strongly Disagree, 5 – Strongly Agree

Section 4: Ethical Concerns

7. I am concerned about academic integrity when using AI in RSOs.

Likert Scale: 1 – Strongly Disagree, 5 – Strongly Agree

8. Clear guidelines should be provided for ethical AI use in RSOs.

Likert Scale: 1 – Strongly Disagree, 5 – Strongly Agree

Section 5: Application-Specific Impact

9. Which AI applications would you find most useful in RSOs? (Select all that apply)

[ ] Creative Idea Generation [ ] Technical Debugging [ ] Data Visualization [ ] Concept Explanation

Section 6: Resource Feasibility

10. What resources do you think are essential for AI workshops in RSOs?

Open-ended: _____

Section 7: Future Intent

11. After participating in AI workshops, I am more likely to pursue AI-related courses or careers.

Likert Scale: 1 – Strongly Disagree, 5 – Strongly Agree

12. Additional comments or suggestions:

Open-ended: _____

Conclusion

- This study proposes a framework for integrating AI education and use into Registered Student Organizations (RSOs).
- Promotes ethical and experiential learning beyond traditional academic settings.
  - creative idea generation
  - technical problem-solving
  - data visualization
  - conceptual explanation
- The framework encourages students to engage with AI in collaborative, informal environments.
- The approach emphasizes clear ethical guidelines to maintain academic integrity while fostering innovation and confidence in AI use.
- Through structured workshops and student engagement surveys, this initiative aims to assess perceptions, identify preferred applications, and evaluate resource needs for successful implementation.
- **Ultimately, the study aims to provide a pathway for students to develop practical AI skills, enhance problem-solving capabilities, and prepare for future technological challenges in a socially responsible manner**

Q & A and Recruitment

- Recruiting RSOs during Winterfest 2026
- Wanting you RSO to be involved?
  - Dr. Mangolika Bhattacharya
  - Daniel Freburg
  - ACM RSO officers