

Strengthening AI and OR Collaboration

Key Recommendations

The Computing Community Consortium (CCC)'s Artificial Intelligence/Operations Research workshop series sought to strengthen collaboration between the AI and OR communities. These collaborations rely on having funding, data, and interesting problems to work on. They also require fostering in-person interaction between the two groups of researchers and aligning incentives in order to engage both communities in research. Several recommendations emerged from the workshop, which range from local university efforts to national funding opportunities.

Funding Opportunities

- **Create Joint Research Institutes:** Establish new institutes or influence existing ones to fund joint AI and OR research.
- **Dual PI Funding:** Introduce funding opportunities that require co-PIs from both AI and OR to stimulate collaborative research.
- **Cross-Evaluated Proposals:** Develop funding programs evaluated by panels from both fields to boost research at their intersection.

Joint Education Initiatives

- **Annual Summer School:** Launch a summer school for PhD students focusing on AI-OR intersection, possibly modeled after AI-SCORE 2024.
- **Ongoing Education:** Establish a speaker series and workshops at conferences like AAAI, IJCAI, NeurIPS and INFORMS for continuous interdisciplinary interaction.
- **Local Initiatives:** Promote joint degree programs and co-advising of PhD students to foster expertise in both fields.

Long-Term Research Programs

- **Collaborative Workshops:** Organize long-term research programs with extended collaborative periods to tackle challenge problems and publish findings.

Aligning Conferences and Journals

- **Targeted Conferences:** Create forward-to-journal opportunities from reputed conferences, jointly hosted by leading researchers from the two communities.
- **Publication Policies:** Establish clear guidelines for evaluating cross-community publications and recognize high-quality venues in both fields.
- **Align Incentives:** Ensure that promotion and tenure policies "count" publications appropriately for each faculty member by establishing a mutual understanding of reputable venues for publishing.

Benchmark Creation

- **Develop Benchmarks:** Introduce and enhance real-world benchmark datasets with socioeconomic and infrastructural layers of complexity, outlining a clear need for cross-collaboration for desired impact.
- **GenAI Applications:** Align on use cases and datasets for GenAI to support effective model training and evaluation.

