

RESEARCH ON PRESCRIPTIVE ANALYTICS FOR AI-ENABLED OPERATIONS ENGINEERING



Department of Industrial and Systems Engineering
University of Missouri

<https://sites.google.com/view/reu-research-ai>

May 30, 2023 - Aug 4, 2023



Objectives of the REU Site

The objective of the REU site is to train students to conduct research on the state-of-the-art prescriptive analytics and develop AI-enabled solutions for real-world applications in Service 4.0, Manufacturing 4.0, and Agriculture 4.0. The summer program will cultivate student interest in developing several creative and novel research works, e.g., (i) real-time scheduling models to optimize the planning and control of unmanned ground vehicle (UGV) - transfer robots (a.k.a. transbots), (ii) creating a Blockchain system for healthcare process improvement, (iii) designing decomposition-based iterative optimization algorithms for dynamically dispatching and routing unmanned aerial vehicles (UAVs), i.e., drones and air taxis, and (iv) understanding genotype, environment and management (G×E×M) interaction using deep learning.

Important Dates

- Application is Open until All Positions Are Filled
- Program Start Date: May 30, 2023
- Program End Date: August 4, 2023

Eligibility

- Undergraduate students who are currently enrolled in universities/colleges with a GPA of at least 3.0
- US citizens or permanent residents
- Underrepresented minorities, women, persons with disabilities, veterans of the US Armed Services and First-generation college students are strongly encouraged to apply

Key Features

- Gain research experience in emerging prescriptive analytics techniques
- Training will be provided to effectively write journal papers and conference proceedings
- Student stipend of **\$600 per week for 10 weeks** during Summer
- Free on-campus housing at MU (if needed)
- Meal allowance provided for \$140 per week for 10 weeks
- Round trip travel expense will be covered
- Other professional developmental activities, such as opportunity to present research work at various events, technical knowledge training by MU faculty mentors, and prospect to discuss future career related choices with faculty and graduate student mentors
- Sustained mentorship beyond the project scope

Requirements

- Upon accepting the offer, participants are required to work for 40 hours per week and complete the entire 10-week summer program
- Very strongly encouraged to have a background knowledge in data analytics and operations research

[APPLY HERE](#)

Contact

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