AGENDA

MCKENNA HALL, 215-216

8:00-9:00AM

Breakfast & Registration

9:00-9:15AM

Welcome & Introduction

Dr. Ed Maginn, Associate VP for Research, University of Notre Dame

Dr. Nitesh Chawla, Founding Director, Lucy Family Institute for Data & Society, and Frank M. Freimann Professor of Computer Science and Engineering
9:15-10:30AM

Panel

*AI in the Future of Education I: Industry Perspectives*

**Moderator:**
Dr. Daniel Lapsley

**Featured Panelists:**
Dr. Alina von Davier (virtual), Dr. Kristen DiCerbo, Dr. Michelle D. Barrett

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10:30-10:45AM

Break

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10:45-12:00PM

Panel

*AI in the Future of Education II: Academic Perspectives*

**Moderator:**
Dr. Ranjodh Singh Dhaliwal

**Featured Panelists:**
Dr. Ryan Baker (virtual), Dr. Hua-Hua Chang, Dr. Josep Domingo-Ferrer
SMITH BALLROOM A/B: MORRIS INN

12:00-1:30PM

Lunch & Poster Session*

*Poster information is available on page 9 of this program.

MCKENNA HALL

1:30-2:30PM

Parallel Research Presentations

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<tr>
<th>MH 202</th>
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| Al-Driven Educational Innovations  
  Chair: Nancy Le  
  Balancing Act: Early Predictions for High School AP Statistics Performance  
  Bo Pei  
  Advanced Knowledge Tracing for Intelligent Tutoring Systems  
  Yikai Lu  
  How AI assisted K-12 Computer Science Education? A System Review  
  Zifeng Liu  
  *Automatic Screening & Diagnosis of Students’ Use of Number Lines  
  Dake Zhang  
  *C.A.R.E. @ Purdue  
  Wonjin Yu |
|   |   | Ethical & Trustworthy AI in Education  
  Chair: Yuanfang Liu  
  Towards Transparent & Trustworthy Prediction of Student Learning Achievement  
  Xiaojing Duan  
  Privacy-Enhancing Technologies for Educationally Focused AI  
  Jonathan Takeshita  
  Distributed Ledgers For Trustworthy and Accountable AI  
  Aditya Joshi  
  * Analyzing Bias & Privacy Impact in Multimodal Generative AI  
  Hai Li  
  * A Machine Learning Approach to Assess Differential Item Functioning in Educational Testing  
  Qizhou Duan |
|   |   |   |

Al in Educational Assessment & Analysis  
  Chair: Toby Li  
  Harnessing Hierarchical Zero-Shot Classifier for Efficient Item Categorization  
  Ting Wang  
  Developing an Automated System for Answering Questions w/ Multiple Options  
  Chandramani  
  Uncovering Key Drivers to Boost Students’ Math Performance Globally Using Machine Learning: A PISA 2018 Study  
  Liu Liu, Rui Dai  
  * How Well Do AI-Generated Recommendations Predict Learners’ Ratings of Educational Content?  
  Teresa Ober |

*: 5-min lightning talk
Break

2:30-2:45PM

Panel

2:45-3:55PM

Challenges and Concerns of AI in Education

Moderator:
Dr. John Behrens

Featured Panelists:
Dr. Kenneth Koedinger (virtual), Dr. Wayne Holmes, Dr. Yiran Chen

Break

3:55-4:05PM
4:05-5:05PM

**Parallel Research Presentations**

**MH 202**

Large Language Models in Education  
Chair: Cheng Liu

- Successes and limitations in teaching mathematical vocabulary using large language models  
  Katherine Ziska

- Recent research on using ChatGPT for professional licensure item development  
  Kirk Becker

- Exploring the use of ChatGPT in academia through Twitter discourse  
  Yingying Jiang

* AI4Sci-Tutor: A Personalized Learning Platform for Scientists  
  Zhenwen Liang

* Integrating Generative AI in Augmented Reality: A New Paradigm for Educational Resource Creation  
  Zifeng Liu

*: 5-min lightning talk

**MH 205**

Conversational AI & Interactive Systems  
Chair: Xiangliang Zhang

- Leveraging AI to Support Participation & Sense-making in Synchronous Group Discussion  
  Xinyue Chen

- VISAR: A Human-AI Argumentative Writing Assistant w/ Visual Programming and Rapid Draft Prototyping  
  Zheng Zhang

- ReadingQuizMaker: A Human-NLP Collaborative System that Supports Instructors  
  Xinyi Lu

* RICE AlgebraBot: Lessons Learned from Designing and Developing Responsible Conversational AI  
  Chenglu Li

* EviRateGPT: A Dynamic Framework for Evaluating Student Evidence-based Reasoning Ability  
  Bo Pei

**MH 206/207**

Perspectives & Futures of AI in Education  
Chair: Teresa Ober

- Artificial Intelligence (AI) & Education – Voices from K-12 Educators in South Korea and the United States  
  Wanju Huang

- Charting AI’s Future in Education: A Framework for the University Notre Dame  
  Ellen Joyce

- New Frontiers in AI Evaluation: Bridging IRT and Machine Learning  
  John Lalor

* Exploring and addressing perceptions of AI through public library partnerships  
  Anne Holland

* Student Creativity in the Age of AI Co-Authorship: A Cognitive Process of Writing  
  Ruyuan Wan

*: 5-min lightning talk
Awards

Closing Remarks

Dr. Sarah Mustillo, Dean of the College of Arts and Letters at the University of Notre Dame

Reception
Key locations on campus:
- McKenna Hall (event venue)
- Morris Inn (lunch & poster session)
- Visitor parking

*Interactive and downloadable versions of the University of Notre Dame campus are available online at: maps.nd.edu
POSTERS

AI in Computer Science Education: A Systematic Review of Empirical Research in 2003-2023
Ke Zhang, Wayne State University

Future Advising with AI: Examining ChatGPT’s Role in Transforming Academic Advising
Julia Qian, University of Notre Dame

Leave them kids (data) alone: privacy concerns in assessment data
Nuno Moniz, University of Notre Dame

Towards Controllable Multiple-Choice Quiz Question Generation for STEM Subjects via Large Language Models
Mengxia Yu, University of Notre Dame

Trustworthy AI requires algorithmic interpretability: Some takeaways from recent uses of explainable AI (XAI) in education
Juan D. Pinto, University of Illinois Urbana-Champaign

A Comparison of the Efficiency of Two Image Processing Models on Identifying Students’ Written Solutions to Fraction Problems
Qihan Lu, Rutgers University

Are Universities Ready for Generative Artificial Intelligence (GAI)? Topic Modeling and Sentiment Analysis of 100 Universities Policy Documents
Brian Waltman, The University of the Incarnate Word

Modeling Student’s Learning Effectiveness through Large Language Model Simulations
Bang Nguyen, University of Notre Dame

Computationally Mediated Analysis of Unstructured Classroom Audio and Video: A Case for Augmenting Classroom Insights
Paul Hur, University of Illinois Urbana-Champaign

Enhancing Online Education: An AI Framework for Non-Verbal Communication Analysis and Collaborative Learning Enhancement
Mohammed Almutairi, University of Notre Dame

Learning Analytics in Organic Chemistry
Thomas Joyce, University of Notre Dame

iSEA: Instructor-in-the-loop Student Engagement Analytics via FAccT AI
Wangda Zhu, University of Florida

Assessing ChatGPT’s Proficiency in Generating Accurate Questions and Answers for Algebra I
Meredith Sanders, University of Notre Dame

How Contexts Matter: Course-Level Correlates of Performance and Fairness Shift in Predictive Model Transfer
Joseph Olson, Teachers College Columbia University

The Virtues of Trustworthy AI
Caroline Quinn, University of Notre Dame

Making A.I. Dance
Kathryn Regala, University of Notre Dame