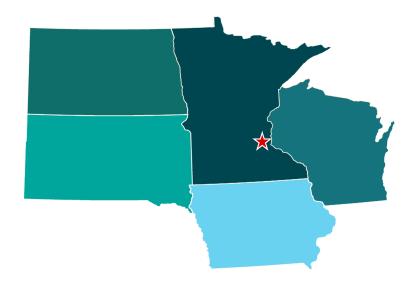
MICS 2024 Program Augsburg University



Check In: 12:00 - 2:00 pm

Welcome and Announcements
1:00 – 1:15 pm Hagfors Center 150

MICS 2024 Guest WiFi Network

SSID: mics2024 Password: AugU1869

Technical Session 1: 1:30-2:30 pm - Friday April 5, 2024

| AI Class | sification: Hagfors 351 | Session Chair: Muhammad Abusaqer |
|----------|---|------------------------------------|
| 1:30 | Text Detection between an AI Written | Saif Khan, Kaif Khan, and Muhammad |
| | Passage vs. a Human Written Passage | Abusager |
| 2:00 | Firefly Spark Classification Optimization | Jacob Olinger and Simone Ludwig |

| Data Science Prediction: Hagfors 352 | | Session Chair: Ben Paulson |
|--------------------------------------|--|--|
| 1:30 | NourishNet: Proactive Severity State | Ben Paulson, Sydney Balboni, Ella |
| | Forecasting of Food Commodity Prices | Bruce, John Cisler, Caitlyn Grant, Grace |
| | for Global Warning Systems | Ivey, Tyge Plater and Brett Storoe |
| 2:00 | Predicting Campus Crime Based on State | Travis Smith and Muhammad Abusaqer |
| | Firearm Policy | |

| Audio: Hagfors 367 | | Session Chair:Hugo Garrido-Lestache |
|--------------------|--------------------------------------|-------------------------------------|
| 1:30 | | |
| | | |
| | | |
| 2:00 | Synthesizing Audio from Silent Video | Hugo Garrido-Lestache Belinchon, |
| 2.00 | ' | - |
| | using Sequence to Sequence Modeling | Helina Mulugeta and Adam Haile |

| Games: Hagfors 373 | | Session Chair: Sieger Canney |
|--------------------|--------------------------------------|----------------------------------|
| 1:30 | Using The Video Gaming Industry As A | Sieger Canney |
| | Lens To Understand The Potential | |
| | Benefits And Effects of Machine | |
| | Learning | |
| 2:00 | The Hearts of AI | Mitchell Johnstone, Sam Keyser, |
| | | Zachary Wentz, Franklin Cole and |
| | | Charles Nortrup |

Break: 2:30 – 3:00 pm - Snacks in Hagfors Center Atrium

Technical Session 2: 3:00 – 4:00 pm - Friday April 5

| Music Education: Hagfors 351 | | Session Chair: Preston Scott |
|------------------------------|------------------------------------|---------------------------------|
| 3:00 | Melodic Equality: Advancing Music | Preston Scott and Benjamin Fine |
| | Education through Automated Lesson | |
| | Generation | |

| Faculty | Grading: Hagfors 352 | Session Chair: Amy Larson |
|---------|--|---------------------------|
| 3:00 | Beyond Traditional Grading: Harnessing | Benjamin Fine |
| | Oral Interviews and Code Reviews for | |
| | Student Success in Computer Science | |
| 3:30 | Improving Student Success in | Amy Larson |
| | Introduction to Programming through | |
| | Reimagined Assignments, Equitable | |
| | Grading, and Peer Instructors | |

| Image P | rocessing: Hagfors 367 | Session Chair: Jacob Jensen |
|---------|--|------------------------------------|
| 3:00 | | |
| | | |
| | | |
| 3:30 | Global Echoes of the FIFA World Cup | Jacob Jensen and Muhammad Abusaqer |
| | 2022: Sentiment and Theme Analysis via | |
| | Deep Learning and Machine Learning on | |
| | Twitter | |

| Medical | Imaging: Hagfors 373 | Session Chair: Christian Basso |
|---------|---------------------------------------|--|
| 3:00 | Adapting Diffusion-Based | Christian Basso, Caleb Andreano and |
| | Image-to-Image Translation Models for | Ben Gadiano |
| | Immunohistochemical Image Generation | |
| | in Breast Cancer Diagnosis | |
| 3:30 | Mind over (Gray) Matter: Homologous | Caleb Gray, Alexander Neher, Sonia |
| | Point Transform Application to Brain | Grade, John Bukowy, Peter LaViolette, |
| | Histology and MR Domains | Bart Gebka, Abigail Draper and Mikolaj |
| | | Sordyl |

Robotics Contest and Pizza Party 4:30 – 6:15 pm in Hagfors Center Atrium

Sponsored by:



Programming Contest Announcements 6:30 – 7:00 pm in Hagfors Center Atrium

Programming Contest 7:00 – 10:00 pm in Hagfors 150

Technical Session 3: 9:00 - 10:00 am - Saturday April 1

| CS Edu | cation: Hagfors 351 | Session Chair: Nolan Dowling |
|--------|---------------------------------------|---------------------------------|
| 9:00 | FactoryCode: A Feasibility Study on a | Nolan Dowling, Ethan Kilmer and |
| | Novel Dynamic Code Visualization Tool | Danny Schmidt |
| | for Introductory Programming Courses | |
| 9:30 | Exploring Mojo: A Comparative | Evan Wiebe and Ryan Harvey |
| | Analysis of its Suitability as a | |
| | Replacement for C++ in Computer | |
| | Science Education | |

| Math -A | agent / Swarm: Hagfors 352 | Session Chair: Asher Sprigler |
|---------|---------------------------------------|---------------------------------------|
| 9:00 | Synergistic Simulations: Multi-Agent | Asher Sprigler, Alexander Drobek, |
| | Problem Solving with Large Language | Keagan Weinstock, Wendpanga Tapsoba, |
| | Models | Gavin Childress, Andy Dao, Lucas Gral |
| 9:30 | Towards Flexible and Scalable Control | Miles Bourassa, Jack Ford, Mitchell |
| | Systems for Swarm Robotics: A | Johnstone, Sam Keyser, Matt Korfhage, |
| | Literature Review and Proposed Design | William Lassiter, Philip Lewander, |
| | | Christian Orozco, Matt Senn, Asher |
| | | Sprigler and Brett Storoe |

| Cyber: | Hagfors 367 | Session Chair: Anushka Hewarathna |
|--------|--|------------------------------------|
| 9:00 | "That privacy policy said what?" | Anushka Hewarathna, Craig Overboe, |
| | Exploring Issues with Privacy Policy | Yixiang Zhang and Jiajun Liu |
| | Comprehension and Privacy Fatigue | |
| 9:30 | Securing the Future of Federated | Riya Patel, Olalekan Raji, Mamadou |
| | Learning in Artificial Intelligence: A | Barry and Akalanka Mailewa |
| | Comprehensive Review of Security | |
| | Challenges, Solutions, and Future | |
| | Direction | |

| LLM: Hagfors 373 | | Session Chair: Ye Yint Win |
|------------------|--|---------------------------------------|
| 9:00 | Researching and Testing ChatGPT and | Ye Yint Win, Nathan Kraft and Ahmed |
| | its Competitors, Separating the Hype | Kamel |
| | from the Facts | |
| 9:30 | Using AI to Detect Lies: Determining the | Alex Ewart, Mikhail Filippov, Jack |
| | Truthfulness of Math LLMs | Dorner, Josiah Yoder, Xander Neuwirth |
| | | and Daniel Portwine |

| CS Edu | cation: Hagfors 152 | Session Chair: Mark Fienup |
|--------|--|-----------------------------------|
| 9:00 | Impact of Generative Artificial | Mark Fienup |
| | Intelligence Tools on the Instruction of | |
| | the Data Structures Course | |
| 9:30 | GeniusDeck: An LLM-driven Web | Brendan Chermack, John Klein, |
| | Application Revolutionizing Student | Matthew Molenaar, Ashesh Nepal, |
| | Learning | Terrance Wallace and Jalal Khalil |

Break: 10:00 – 10:30 Snacks in Hagfors Atrium

Technical Session 4: 10:30 – 11:30 - Saturday April 6

| America | an Sign Language: Hagfors 351 | Session Chair: Nolan Dowling |
|---------|---------------------------------------|--|
| 10:30 | Enhancing American Sign Language | Leigh Goetsch, Aiden Miller, Liam |
| | Learning through Landmark-Based | Otten, Tyler Schreiber and Michael |
| | Recognition and Sequence Modeling | Conner |
| 11:00 | Harnessing FPGA Acceleration for | Asher Sprigler and Jacob O'Shaughnessy |
| | Real-Time Sentiment Analysis in Music | |
| | Waveforms | |

| DB & C | ompilers: Hagfors 352 | Session Chair: John Walbran |
|--------|--------------------------------------|-----------------------------------|
| 10:30 | Large Language Models Based Compiler | John Walbran and Wenkai Guan |
| | Optimization: Summary of Recent Work | |
| | and a Proposed Framework | |
| 11:00 | An Analysis of a MySQL Inventory | Tan Nguyen, Erich Rice and Dennis |
| | Database and Potential Memory | Guster |
| | Vulnerabilities | |

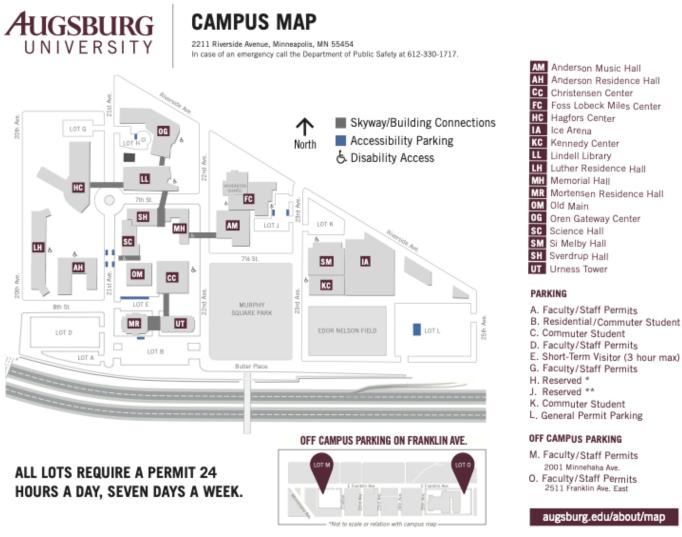
| Code Vi | z: Hagfors 367 | Session Chair: Collin Hemze |
|---------|---------------------------------------|--------------------------------------|
| 10:30 | MATQVis: A Web-Based Query and | Collin Hemze, Khaled Shaheen, Faisal |
| | Visualization Tool for MATSim | Shaheen and Jalal Khalil |
| 11:00 | Concurrency Visualization: Three Ways | Shuta Kumada and Samantha S. Foley |

| Cyber: | Hagfors 373 | Session Chair: Adow Ali |
|--------|--|--------------------------------------|
| 10:30 | The Human Factor in Cybersecurity: | Adow Ali, Craig Overboe, Thivanka |
| | Understanding Psychology, Training | Mohottalalage and Akalanka Mailewa |
| | Efficacy, and Error Reduction Strategies | |
| 11:00 | Decoding the Cyber Battlefield: A | Deb Saha, Thivanka Mohottalalage and |
| | Review of Threats, Tactics, and | Akalanka Mailewa |
| | Defensive Strategies in Cyber Warfare | |

| | Med & AI: Hagfors 152 | Session Chair: Mitchell Mahnke |
|-------|---------------------------------------|---------------------------------------|
| 10:30 | Reading Between the Lungs: Evaluation | Mitchell Mahnke, Evan Schubert, Will |
| | of Deep Learning Model Architectures | Sebelik-Lassiter and Theodore Colwell |
| | for COVID-19 Classification on | |
| | Segmented Chest X-rays | |
| 11:00 | The AI Applications in Radiology: | Jacob Olinger and Olga Scrivner |
| | Regulation, Evaluation, and Usage | |

Awards Ceremony 11:45 – 12:15 pm in Hagfors Center 150

Box Lunches and Dismissal 12:30 pm in Hagfors Center Atrium



Updated December 12, 2017 8:39 AM

Park in Lot D or L: (no permits required in those lots)

Important Contacts:

mics2024@micsymposium.org

Augsburg University Public Safety at 612-330-1717

Nearby Restaurants:

Nabo - located in Oren Gateway Center (Friday until 6pm, closed Saturday)
Einstein's - located in Christensen Center (Friday until 8pm, Saturday 7:30am to 3pm)
Jimmy John's - located on Riverside just north of Hagfors (10:30am to 10pm)
Oasis Mediterranean Grill - located on Riverside & 20th just north and west of Hagfors (11am-8pm)