



UNIVERSITY OF NEBRASKA AT OMAHA
COLLEGE OF INFORMATION SCIENCE & TECHNOLOGY
COMPUTER SCIENCE

BEST PRESENTATION AWARDS

(AMAZON GIFT CARD)

1ST AWARD: \$200

2ND AWARD: \$150

3RD AWARD: \$100

9TH ANNUAL COMPUTER SCIENCE RESEARCH WORKSHOP

The Computer Science Research Workshop is managed by the
Computer Science Graduate Program Committee.

For comments:

Dr. Azad Azadmanesh - azad@unomaha.edu

Dr. Yuliya Lierler - ylierler@unomaha.edu

5 APRIL 2019
PKI 158

EVENT SCHEDULE

MORNING SESSION

- 9:30 Opening Social
- AI, MACHINE LEARNING, DATA ANALYSIS**
- 10:00 Learning from Imbalanced Datasets: Evaluating the Predictive Accuracy of Minority Classes
Student: Adithi Deborah Chakravarthy
Advisors: Dr. Qiuming Zhu, Dr. Zhengxin Chen
- 10:15 A Technique for Improving Classification Accuracy of Highly Imbalanced and Sparse Datasets
Student: Sindhura Bonthu
Advisor: Dr. Qiuming Zhu
- 10:30 An Application of Artificial General Intelligence in Board Games
Student: Nathan Skalka
Advisor: Dr. Raj Dasgupta
- 10:45 Machine Learning Techniques for Predicting Mobility-Related Perception Errors in Astronauts
Student: Steven Belcher
Advisor: Dr. Raj Dasgupta
- 11:00 Intelligent and Human-Aware Decision-Making for Semi-Autonomous Human Rehabilitation Assistance Using Modular Robots
Student: Anoop Mishra
Advisor: Dr. Raj Dasgupta
- 11:15 Processing Narratives by Means of Action Languages
Student: Craig Olson
Advisor: Dr. Yuliya Lierler
- 11:30 Co-Designing an Academic Focus Mobile Application
Student: Farhat Afzali
Advisor: Dr. Briana Morrison
- 11:45 Analysis of Subgoal Data in Computer Science Principles - Data Cleaning
Student: Hari Ramilson
Advisor: Dr. Briana Morrison

LUNCH BREAK

- 12:00 Pizza Lunch

AFTERNOON SESSION

SOFTWARE ENGINEERING

- 12:45 Tool Support for Recurring Code Change Inspection with Deep Learning
Student: Krishna Teja Ayinala
Advisor: Dr. Myoungkyu Song
- 1:00 Automated Tool Support for Security Bug Repair in Mobile Applications
Student: Larry Singleton
Advisors: Dr. Harvey Siy, Dr. Myoungkyu Song

PROGRAMMING LANGUAGES

- 1:15 Automatic Program Rewriting for Non-Ground Answer Set Programs
Student: Nicholas Hippen
Advisor: Dr. Yuliya Lierler
- 1:30 Dynamic Lazy Grounding in Answer Set Programming
Student: Brian Hodges
Advisor: Dr. Yuliya Lierler

VIRTUALIZATION, SIMULATION

- 1:45 Simulator for Qubit Measurement Using Augmented Reality
Student: Sai Pradeep Koneti
Advisors: Dr. Mahadevan Subramaniam, Dr. Abhishek Parakh
- 2:00 Implementation of Fast Hydraulic Erosion Simulation and Visualization on GPU
Student: Brian Hawkins
Advisor: Dr. Brian Ricks
- 2:15 Snack Break

INTELLIGENT NETWORK SYSTEMS

- 2:45 Conflict Resolution Using Alpha-Shapes for Distributed Robotic Sampling of Ambient Phenomena in Initially Unknown Environments
Student: Bradley Woosley
Advisor: Dr. Raj Dasgupta
- 3:00 A Formal Approach to Circle Formation in Multi-Agent Systems
Student: Rui Yang
Advisor: Dr. Azad Azadmanesh
- 3:15 Consensus-Based Robotic Formation Control
Student: Satish Reddy Modugu
Advisor: Dr. Hassan Farhat
- 3:30 Performance Analysis of Voting Algorithms in Wireless Sensor Networks
Student: Aditi Mishra
Advisor: Dr. Azad Azadmanesh
- 3:45 Parallel Scalable Algorithms for Updating Dynamic Networks
Student: Sriram Srinivasan
Advisor: Dr. Sanjukta Bhowmick
- 4:00 Closing Social