

Lunabotics Wheel Design

Isaiah Salcedo, *College of Engineering*

Kevin Kuida, *College of Engineering*

Ty Hill, *College of Engineering*

Jay Shah, *College of Engineering*

Mentor: Nichole Ramirez

VIP Lunabotics Wheel Traction and Turing Capacity Test Rig

Trevor Smyth, *College of Engineering*

Gabriel Montoya, *College of Engineering*

Mentor: Nichole Ramirez

contRAST

Abigail Sullivan, *College of Health and Human Sciences*

Mentor: Renee Murray

Lunabotics Excavation Testing Rig

Luke Williams, *College of Engineering*

Chase Grimm, *College of Engineering*

Nathan Meador, *College of Engineering*

Andrew Steger, *College of Engineering*

Mentor: Nichole Ramirez, Nathan Stonitsch



We encourage participants and visitors to provide feedback to all presenters. To submit an evaluation, please scan this QR code with your device's camera. Scores will determine top awards.

Presentation numbers are on the table and after titles above.

QR code on printed programs

WELCOME TO

CELEBRATE PURDUE'S THINKERS, CREATORS & EXPERIMENTERS

April 23, 2024

11am-1pm

**Purdue Memorial Union
South Ballroom**

PURDUE UNIVERSITY

Office of Undergraduate Research

Presentations listed by first author's last name. Names listed as submitted.

Purdue Lunabotics Excavation & Deposition Systems

Caleb Abbruzzi, *College of Engineering*

Rachel Barder, *College of Engineering*

Nikolai Perebeinos, *College of Engineering*

Evan Gilheany, *College of Engineering*

Mentor: Nicole Ramirez

Echoes of a Home

Alyssa Androff, *College of Health & Human Sciences*

Mentor: Renee Murray

Lunabotics Dust Mitigation

Jeremiah Arona, *College of Engineering*

Thomas Chuang, *College of Engineering*

Ethan Miller, *College of Engineering*

Dhilan Patel, *College of Engineering*

Mentor: Nichole Ramirez

RoboMasters Social Media

Andrew Behl, *School of Business*

Drake Hagerman, *School of Business*

Mentors: Shivam Bhat and Zijian He

An Origami-Inspired Tree Climbing Robot

Harrison Booker, *College of Engineering*

Atharva Awasthi, *College of Engineering*

Mentors: Ran Dai and Yuto Tanaka

Addressing Tetrachloroethylene Exposure in an Impacted Community

Katelyn Bottando, *College of Agriculture*

Mentor: Sa Liu

between the lines

Yunchong Chen, *College of Liberal Arts*

Rachel Chen, *College of Engineering*

Mentor: Renee Murray

VIP Lunabotics Power & Hardware

Seth Feickert, *College of Engineering*

Olivia Purdy, *College of Engineering*

Rowe Tracy, *College of Engineering*

Hunter Biggs, *College of Engineering*

Sean Kelley, *College of Engineering*

Mentor: Nicole Ramirez

Impact of Generative AI on Education & Research

Riddhi Gupta, *College of Science*

Mentor: Lisa Bosman

Gustav Mahler: The Piano Rolls

Rebecca Hackett, *Colleges of Science and Liberal Arts*

Mentors: Adam Bodony and Tae Hong Park

We are many people

Audrey Harrison, *College of Science*

Mentor: Renee Murray

Ag-DOST: A friendly and Intelligent Chatbot for Farmers

Jungeun Hwang, *College of Science*

Son Thai Ha, *College of Science*

Mentors: Dharmendra Saraswat and Varun Aggarwal

Crater Detection with RGBD for SLAM

Andrew Kreimer, *College of Engineering*

Junyoung Kim, *College of Engineering*

Suhani Mathur, *College of Engineering*

Mentor: Nichole Ramirez

MotionPose: Machine Learning in Motion

Michael Li, *College of Science, School of Business*

Arunima Chowdhury, *College of Science*

Shamsad Rahman, *College of Engineering*

Hai Lam Le, *College of Engineering*

Roohee Urs, *College of Science*

Mert Ryan Kiroglu, *School of Business*

Sami Zaghera, *College of Science*

Ryan Leonard, *College of Science*

Rishi Mantri, *College of Engineering*

Zahra Ghorrati, *Purdue Polytechnic Institute*

Mentors: Renee L Murray and Frederick C Berry

FDB Medication Risk Implementation and Design

Adam Ma, *College of Science*

Mentor: Donna Dillihay

Internal Thoughts

Kennedy Miller, *School of Business*

Mentor: Renee Murray

Roller Coaster Track and Support Structure: Dynamics, Simulation, and Optimization

Rohan Patel, *College of Engineering*