41st semi-annual Dr. Janet Liou-Mark

HONORS SCHOLARS & UNDERGRADUATE RESEARCH

Poster Presentation

2024

Wednesday, December 4
Poster Presentation
(Poster Judging)
10:00am - 4:00pm
Academic Complex Lobby

Thursday, December 5
Poster Presentation
(Award Ceremony)
12:45pm - 2:15pm
Amphitheater LG30

In Remembrance of
Dr. Janet Liou-Mark

GREETINGS

Russell K. Hotzler
President

Pamela Brown
Provost & Vice President
for Academic Affairs

Reginald A. Blake
Associate Provost and Dean of
Curriculum and Research

RECOGNITION OF UNDERGRADUATE RESEARCHERS

Honors Scholars
Reneta D. Lansiquot-Panagiotakis
Director of the Honors Scholars Program
& Co-Director of the Interdisciplinary Design
Game-Based Learning Lab

CUNY Research Scholars Program (CRSP), Louis Stokes Alliance for Minority Participation (LSAMP), & CUNY Immersive Research Experience (CIRE)
Susan Davide
Associate Director of Undergraduate Research

Emerging Scholars
Hamidreza Norouzi
Director of Undergraduate Research

Grant-Funded Projects
Hamidreza Norouzi
Director of Undergraduate Research

Best Poster Awards
Tamrah D. Cunningham
Interim Assistant Director of the Honors Scholars
Program & Co-Director of the Interdisciplinary Design
Game-Based Learning Lab

HONORS IN REGULAR COURSES

The Therapeutic Potential of Ashwagandha: A Comprehensive Review of Its Anti-Inflammatory and Neuroprotective Effects

Ali Al-gemsh, Joana Ciro, & Hilda Wu
Prof. Sanjoy Chakraborty
BIO 2311: Human Anatomy and Physiology I

The Industrial Decline of the Red Hook Waterfront

Jessica Calderon-Ascencion
Prof. Susan Phillip
HMGT 4987: Urban Tourism

Thermal and Chemical Degradation of Feldspathic Ceramic VS Lithium Disilicate Implication of Long-Term Oral Health

Dan Hong Chen
Prof. Daniel Alter
RESD 2314: Restorative Dental Ceramics II

Non-Destructive Concrete Testing

Roland Guevara
Prof. Navid Allahverdi
CMCE 2306: Materials Testing Laboratory

Valve Train Design and Testing

Luis Luna
Prof. Zayed Saleh
MECH 3510: Advanced Solid Modeling II

Accessible Assistive Technology through 3D Printing

Hailah Nagi
Prof. David Lee
COM 2403ID: Health Communication

NASA Microgreen Cultivation in Space Utilizing PEGDA Hydrogels

Zohaib Khan
Prof. Ozlem Yasar
MECH 2322: Engineering Materials

Fotoescultura Publication: Exploring Latina Artists in the Diaspora

Lau Nielsen
Prof. Amera Rime Lulu
COMD 2400: Communication Design II

The Bulletin Board

Noor Mohammed Raj
Prof. Tamrah D. Cunningham
CST 2309: Web Programming I

Study and Analysis of the Design of a Robot Manipulator

Kimberly McLaurin
Professor Farrukh Zia
EMT 1220: Mechanisms

Epitaphs and Elegies: Exploring the Poetics of Death in Green-Wood Cemetery

Kristine Rakowsky
Prof. Robert Ostrom
ENG 2003: Introduction to Literature III Poetry

Graph Theory and GitHub

Angelica Tellez
Prof. Johann Thiel
MAT 3770: Math Modeling I

Healthcare Setting Observation

Ayah Yusuf
Prof. Duval Bodden
COM 1403: Introduction to Communication in Healthcare Professions

Simulations, Physics, and the Visual Arts

Rona Zhang
Prof. Satyanand Singh
MAT 2572: Probability and Statistics

Project Panels

Mental Healthcare Marketing: How Effective Are Social Marketing Campaigns in Reducing Mental Health Stigma Within Low-Income or Vulnerable Communities?

Sunita Cheddie
Prof. Delia Williams-Gunpot
HSCI 4970: Social Marketing in Healthcare Settings

Cloud-Controlled Smart Lamp

Shiou Ching Chen
Prof. Xin Zhou Wei
EET 3112: Advanced Microcontroller and Embedded System Design

Hard Memory: A Zine Study on Digital Media Evolution

Amir Gamble
Prof. Dirk Rowntree
COMD 1257: Typographic Design

3000 Main Street: 3D Modeling Using Revit

Ali Haruna
Prof. Wendy Chang
CMCE 2410: Construction Drawings II (CAD)

Sustainability Powering the Next Generation of Data Centers

Jalen Jones
Prof. Alexander Grijalva
CST 4700: IT Service Management

Government and Volunteer Collaboration: SHAP's Role in Addressing NYC's Homeless Crisis

Kristine Rakowsky
Prof. Peter Parides
GOV 1102: State and Local Government

The Steps in Opening a Daycare Facility

Nardia Anglin Taylor
Prof. John Akana
HMGT 3501: Workforce Management

SPECIAL PROJECTS

Amazed: Teaching architectural design styles with a board game

Monisha Sooklall
Profs. Tamrah D. Cunningham
& Reneta D. Lansiquot-Panagiotakis

Community All Stars

Caetana Abreu de Castro Matos, *HOPE Community Services*; Chela Charles, *Wyckoff Heights Food Drive*; Sasha Cummings; *N.E.S.T.* ; Aastha Momi, *Gobind Sarvar*; Lau Nielsen, *Brooklyn Movement Center*; Jessica Gomez Parral, *The Migrant Center of the Church of St. Francis of Assisi*; Kristine Rakowsky, *Street Homeless Advocacy Project (SHAP)*; Eileen Gonzaga Ramos, *Salvation Army Pantry Kitchen;* & Donald Witherspoon, *Man Up! Inc.*
Prof. Tamrah D. Cunningham

PHYS 1002ID: Introduction to Physics of Natural Disasters

Prof. Yanna Chen

The Human Impact: How Climate Change Affects Us All

Kevin Balbuena, Jacky Deng, Salman Khan, Garush Vahan Martirosyan, James Rosas Cruz & Ethan Yim

Earthquakes Risks and Resilience in Urban Areas

Brandon Chen, Jandelle Andrea Hemandez, Nushrat Jahan, Muhammad Jamil, Ayo David Johnson & Clifton McFarlane

Rising Waters: Urban Flood Solutions

Sabina Abduvakhidova, Jaedritz-Angel Agustin, Claudia Chavez, Terrell Shacore Gayle, Zohaib Khan & Xiaolong Yang

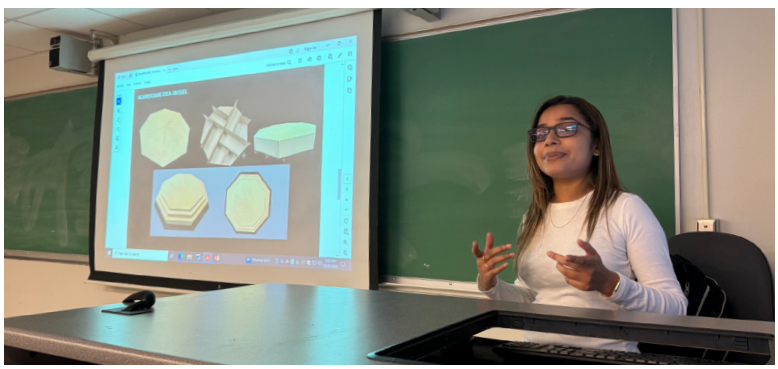
Spiral of Destruction

Nelie Sarah Louissaint, Alex Manuel Maldonado, Shervan McLean & Shante Alecia Miller

Game Day, September 19, 2024

Game Jam: Perfectly Acceptable, Setpember 26, 2024

Game Jam: Final Fantasy Retrospective, October 24, 2024



Monisha Sooklall, game lab intern, board game presentation, October 24, 2024

CUNY RESEARCH SCHOLARS PROGRAM (CRSP) & LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION (LSAMP)

Illuminating the Connection Between Galaxy Morphology and Evolution with the Legacy Survey Of Space and Time

Samiya Shamsur
Prof. Charlotte Olsen

Find A Specific Area of Cybersecurity, Vendors, and Solutions Available Within That Area

Carl-Handy Abraham
Prof. Ossama Elhadary

Reinforcement learning, Statistical learning, Artificial intelligence, Data analysis

Ostap (Ari) Tymchenko
Prof. Kim Changkyu

Rebuilding John Hurt's Legacy: Historic Preservation in the Deep South

Natalie Simons
Prof. Shelley Smith

Traumatic Brain Injury Modeling by Chemical Mass Transfer

Vanessa Robinson & Xionghui Wu
Prof. Subhendra Sarkar

Hands-on Service Learning With Low-Cost Assistive Technology

Alison Escalante, Melissa Fernandes & Jasmine Tran
Prof. Farrukh Zia

CyberSecurity Products Comparison

India Barker
Prof. Ossama Elhadary

Monitoring Heat in the NYC Subway System

Isatu Jalloh
Prof. Abdou Bah

Remixing and Adapting Virtual and Non-virtual Manipulatives in the Teaching and Learning of High School Mathematics: Incorporating Computational Thinking in Preservice Mathematics Teachers' Preparation

Alyssa Johnson & Yadira Vazquez
Profs. Nadia Kennedy & Ariane Masuda

Parameters for Entanglement Between Various Qubits for Quantum Computers

Alyssa Burtsev, Melissa Demollari & Elizabeth Frias
Prof. Oleg Berman

How Can The Individual Effectively Make Change

Kaydin Chappel
Prof. Javiela Evangelista

The Use of Social Media to Predict Election Results

Risha Harata
Prof. Marcos Pinto

Alignment of Data Science Techniques to Production and Operations Management Decision Making

Benny Wu
Prof. Patrick Slattery

Pandemic to Present Ozone Analysis Comparison: LiDAR's Role in Urban Air Quality Monitoring

Julissa Mendez
Prof. Viviana Vladutescu

Re-Purposed Whole Textile Reinforced Clay to Enhance Bearing Capacity of Pavement Soils

Angelis Almanzar, Chrisly Narcisse & Yoselin Sarita
Prof. Ivan Guzman

Visualization and Analysis of Environmental Data OR Natural Capital Accounting

Hasib Mahmood
Prof. Ossama Elhadary

Study and Analysis of the Design of a Robot Manipulator

Kimberly McLaurin
Prof. Farrukh Zia

The Standard Model of Particle Physics

Christopher Osorio
Prof. Andrea Ferroglia

A Geospatial Analysis of the Intersection of Livability and Sustainability in NYC

Arianna Dilillo & Sonya Weinstock
Prof. Anne Leonhardt

Transforming Computer Technology Into Green Technology

Ruth Orlanne Gaboton
Prof. Farrukh Zia

Can Graphic Design Help Improve Overall Communication?

Ze Huang & Michael Lester
Prof. Maureen Neuringer

Understanding the Impact of Climate Change and Building Energy Consumption

Rashiek Barber, Abdellah Gessra, Takoda Nestor, Christopher Sanchez & Ferasuddin Siddiqui
Prof. Daeho Kang

Building An R Library of Financial Functions

Manahill Arshad & Kevin Ramon
Prof. Ossama Elhadary

Optical Prediction of Personality Characteristics

Tamara Tugulashvili
Prof. Daniel Capruso

Secondary X-Ray Generation by Composite Filters

Jasper Cheung, Daler Djuraev & Somdat Kissoon
Prof. Subhendra Sarkar

Remixing and Adapting Virtual and Non-virtual Manipulatives in the Teaching and Learning of High School Mathematics: Incorporating Computational Thinking in Preservice Mathematics Teachers' Preparation

Alyssa Johnson & Yadira Vazquez
Profs. Nadia Kennedy & Ariane Masuda

Parameters for Entanglement Between Various Qubits for Quantum Computers

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Prof. Oleg Berman

How Can the Individual Effectively Make Change

Kaydin Chappel
Prof. Javiela Evangelista

CUNY IMMERSIVE RESEARCH EXPRIENCE (CIRE)

The Use of Social Media to Predict Election Results

Risha Harata
Prof. Marcos Pinto

Alignment of Data Science Techniques to Production and Operations Management Decision Making

Benny Wu
Prof. Patrick Slattery

Pandemic to Present Ozone Analysis Comparison: LiDAR's Role in Urban Air Quality Monitoring

Julissa Mendez
Prof. Viviana Vladutescu

Network Security Technology

Jamel Williams
Prof. Xiangdong Li

Advanced Assistive Technology Facilitates Hands-on Service Learning

Suchi Chowdhury & Majida Naz
Prof. Farrukh Zia

Remixing and Adapting Virtual and Non-virtual Manipulatives in the Teaching and Learning of High School Mathematics: Incorporating Computational Thinking in Preservice Mathematics Teachers' Preparation

Alyssa Johnson & Yadira Vazquez
Profs. Nadia Kennedy & Ariane Masuda

Exploring the Idiosyncratic Volatility Puzzle

ZiHan Cao
Prof. Ossama Elhadary

Secondary X-Ray Generation by Composite Filters

Jasper Cheung, Daler Djuraev & Somdat Kissoon
Prof. Subhendra Sarkar

Artificial Intelligence - Machine Learning, Mobility - Mobile (phones, iPads, watches, etc) apps, Web apps

Joel Mejia
Prof. Marcos Pinto

Incorporating AI in the Teaching and Learning of School Mathematics: Design and Assessing Activities with AI for the Mathematics Classroom

Rachel Dawidowicz
Prof. Nadia Kennedy

EMERGING SCHOLARS PROGRAM

NMR Investigations of Ion Transport in Novel Electrolytes

Elizabeth Brandwein
Prof. Steve Greenberg

The Solar Shed

Andrew Aucanzhala & Kevin Hernandez
Prof. Kenneth Conzelmann

4G Cellular Bandwidth Allocation Algorithms for Supporting M2M Services

Irina Urmi, Youssef Rouzaqui, Adnan Nabil
Profs. Ahmed Hassebo & Sanjoy Chakraborty

A Geospatial Analysis of the Intersection of Livability and Sustainability in NYC

Arianna Dilillo & Sonya Weinstock
Prof. Anne Leonhardt

A Model to Classify Face Emotion

Angie Navarro
Prof. Marcos Pint

A review of Ashwaganda, a Medicinal Plant, and its Effect on Inflammation and Neuroprotection

Ali Al-Gemsh, Joana Ciro & Hilda Wu
Prof. Sanjoy Chakraborty

Advanced Assistive Technology Facilitates Hands-on Service Learning

Suchi Chowdhury & Majida Na
Prof. Farrukh Zia

Anti-inflammatory Potential of Common Culinary Herbs and Spices: A comprehensive Review of Ginger, Garlic, Tumeric, and More

Ajla Feratovic
Prof. Sanjoy Chakraborty

Apply Machine Learning to Detect and Predict Fraud in Credit Card Transactions

Bartlomiej Gralak
Prof. Marcos Pinto

AR Scavenger Hunt/Fun Facts Finder

Amir Gamble
Prof. Jenna Spevack

ARCscholars

Bryant Ariza, Sofia Bilbao, Kaylynn Daoud & Alex Mendoza
Prof. Naomi Langer-Voss

Arduino Obstacle Avoidance Electric Vehicle

Kristian Rice
Prof. Ahmed Hassebo

Arduino-Based Color Detection Electric Vehicle

Louis Medina & Egypt Paige
Prof. Ahmed Hassebo

Arduino-Based Irrigation Research

Erick Cabrera
Prof. Ahmed Hassebo

Are New Yorkers Prepared for Coastal Flooding? An analysis of 2023 National Household Survey on Disaster Preparedness

Suzana Edmond & Erica Falcon
Prof. Smita Ekka Dewa

Are Quantum Computers Suitable as Accelerators for Numerical Modeling of Diffusion Processes?

Sean Sinclair
Prof. German Kolmakov

Assessing the Autoantibody Repertoire During Malaria

Sanobar Mardonova
Prof. Juan Rivera-Correa

Authority and Legitimacy in the Albanian Case: the Kanun

Enis Ukaj
Prof. Xavier Moysen Alvarez

Behind the Emerald Curtain: The Aesthetics of Wicked

Amanda Padilla
Prof. Sue Brandt

Blended Shadow Puppet

Samuel Cheung
Prof. David Smith

Brewing Recommendations: A Data-Driven Approach to Coffee Recommendations Using Linear Algebra

Angelica Tellez
Prof. Johann Thiel

Building an R Library of Financial Functions

Manahill Arshad & Kevin Ramon
Prof. Ossama Elhadary

Bullying and Suicide Prevention

Amari Ellis
Prof. Annie Ngana Mundeke

Careers in Architecture

Ash Robertson
Prof. Charles Jenkins

Characterizing NADPH Oxidase genes in Tetrahymena Thermophila

Joshua Fernandez
Prof. Ralph Alcendor

Characterizing Thioredoxin gene in Tetrahymena thermophila

Susanna Pahalyants
Prof. Ralph Alcendor

Cinnamon and Gene Expression: A Systematic Review

Monique Fungkhee, Matthew Velez & Rita Zou
Prof. Ralph Alcendor

Combinatorial Problems

Jessica Gustave
Prof. Satyanand Singh

Combinatorial Analysis II

Emmanuel Oitamong
Prof. Satyanand Singh

Control Systems in Hydraulic Technology

Ahmad Rafi
Prof. Mohammed Islam

Data Science Ethics in Cancer Research

Jade Acevedo
Prof. Elizabeth Milonas

Department of Energy Solar Decathlon Design Challenge

Levi Fraser
Prof. Alexander Aptekar

Design and Fabrication of Custom Assistive Technology Devices

Mareefa Khanam
Prof. Farrukh Zia

Developing a Pilot Framework for a Virtual Shadow Puppet Environment in Unity

ZiXuan Wu
Prof. David Smith

Effects of Electric Field and Heat on X-Ray Absorption by Biological Media

Hala Yousef
Prof. Subhendra Sarkar

Exploring Properties Of Resolved Regions In Galaxies Through Cosmic Time

Ena Chia
Prof. Charlotte Olsen

Fabrication and photoluminescence of 2D semiconductor materials

Keven Cruz, Tomas Gonzalez & Stefanie Rivera
Prof. Vitaliy Dorogan

Form and Airflow: Integrating Sculptural Aesthetics with Passive Ventilation

Gladys Vigil
Prof. Alexander Aptekar

Fraud Detection in Financial Transactions

Faria Promi
Prof. Elizabeth Milonas

Future Cities / Transportation

Fahima Zannat
Prof. Anne Chen

Garden Monitoring System using IOT

Afroza Aktar
Prof. Farrukh Zia

Governance of AI: Potential Risks, Mitigations, and Automated Controls

Ibraheem Esa
Prof. Patrick Slattery

Hands-on Service Learning With Low-Cost Assistive Technolog

Alison Escalante, Melissa Fernandes & Jasmine Tran
Prof. Farrukh Zia

Healthcare Systems

Halima Alazeb
Prof. Farrukh Zia

How Are Forensic Tools Used to Gather Evidence?

Orlando Salas
Prof. Yu-Wen Chen

How can Human Services Respond to Domestic Human Trafficking?

Rosalyn Mcintos
Prof. Smita Ekka Dewan

How Do South Asians Communicate in Healthcare Settings with Respect to Their Cultural/Ethnic Backgrounds?

Sabahat Moughal
Prof. Sarah Price

How Has Russian Propaganda from the Soviet Era Been Repurposed in Today's Conflict with Ukraine?

Ahmed Babaev
Prof. Stephanie Boyle

How Have Strategic Management Practices Evolved to Drive Innovation and Business Creativity with AI?

Kevin Moreno
Prof. Shakira Henry

Immigrant Children's Perspective on Parents Coping Mechanism and Manners of Internalization

Bisleisy Galindo Dejesu
Prof. Smita Ekka Dewan

Impact of AI in Society

Khalid Farhad & Daniela Sanchez
Prof. Suela Aalsberg

Implementation of multi-agent reinforcement learning algorithm

Yahya Mohamed
Prof. Changkyu Kim

Innovations in Full-Stack Web Development: Front-end to Back-end

Yassine Chahid
Prof. Patrick Slattery

Integrating Ecological Design Principles into Urban Public Spaces for Community Well-Being

Priya Babu & Rayen Osorio
Prof. Anne Chen

Learning Strategy of Multi-Agent Reinforcement Learning in an Open Environment

Parviz Subkhankulov
Prof. Changkyu Kim

Material Sensitivity in Dentistry: Silver and Nickel Based Alloy

Dan Chen & Abbi Raper
Prof. Daniel Alter

Mechanical Stress Induced Mineral Displacement in Apples

Achlyn Genao & Natalya Tomskikh
Prof. Subhendra Sarkar

Moderating Effects of Consumer Traits and Situational Factors of Collaborative Consumption

Juan Del pozo Severino
Prof. Alyssa Dana Adomaitis

MR Diffusion Databases to Identify Common, Vulnerable Regions in Various Neurological Diseases

Jakiya Akter
Prof. Subhendra Sarkar

NASA Lunar Geopolymer Project

Maria Hashmi
Prof. Sam Rahman

NASA Microgreen Cultivation in Space Utilizing Minimum Water

Fabiha Samiha
Prof. Ozlem Yasar

Network Security Research

Yinson Tso
Prof. Xiangdong Li

Nightmare of Dengue Fever

Williana Alcis
Prof. Liana Tsenova

Off the Grid and Thriving: A Regenerative Architecture

Lamar Charles, Jeremyah Herrera, Michael Ray Malonjao, Thomas Plunkett, Jocelyn Sanchez & Brailyn Ventura
Prof. Alexander Aptekar

OpenLab Design / Outreach

Adaliat Iusupova
Prof. Jenna Spevack

Optimizing Indoor Environment Quality

Anjum Ahmmed, Nick Antoine, Christopher Gabriel Lopez, Jennifer Garcia & Marti Tapia
Prof. Alexander Aptekar

Optimizing Microgreen Growth: Seed Germination in PEGDA

Ousmane Diallo, Tonatiuh Fitzgerald, Zohaib Khan, Samuel Mensah & Kelly Wu
Prof. Ozlem Yasar

Parameters for Entanglement Between Various Qubits for Quantum Computers

Alyssa Burtsev, Melissa Demollari & Elizabeth Frias
Prof. Oleg Berman

Pearl Poster Designs

Oscar Wong
Prof. Maria Hitchings

PEGDA Tissue Research

Emily Yong
Prof. Ozlem Yasar

Probabilistic Simulations

Rona Zhang
Prof. Satyanand Singh

Programming and Control of ROS-Compatible Turtlebot with an Onboard Manipulator

Christian Rosa
Prof. Lili Ma

Public Space: Impact on physical, mental and social health of communities

Patricia Marrero (Allen) & Josue Peralta
Prof. Smita Ekka Dewan

Queer Signaling and Sexuality-Based Discrimination

Christal Jean-Soverall
Prof. Annie Ngana Mundeke

Reconstructing Cosmic Filaments around Dwarf Galaxies with the Rubin Observatory

Sarah Draves
Prof. Charlotte Welker

Reimagining Wayang Kulit: A Modern Storytelling Approach

Tshari Yancey
Prof. David Smith

Re-Purposed Whole Textile Reinforced Clay to Enhance Bearing Capacity of Pavement Soils

Angelis Almanzar, Chrisly Narcisse & Yoselin Sarita
Prof. Ivan Guzman

Research Skills

Brandon Rios
Prof. Lillian Amann

Secondary X-Ray Generation by Composite Filter

Jasper Cheung, Daler Djuraev & Somdat Kissoon
Prof. Subhendra Sarkar

Securing the Endpoint: A Comparative Analysis of Leading Security Solutions

Darling Cespedes
Prof. Ossama Elhadar

Smart City Self-Driving Security

Sumiya Jahan
Prof. Anne Chen

Social Media Addiction

Ricky Yin
Prof. Amera-Rime Lulu

The Solar Shed

Andrew Aucanzhala & Kevin Hernandez
Prof. Kenneth Conzelmann

SQL Work Applied to Real Jobs

Jaquan Lasalle
Prof. Elizabeth Milonas

Strong Interactions and Big Bang Nucleosynthesis

Alexis Vidals
Prof. Boris Gelman

Sustainability and Dental Waste, Effects on the Environment

Kailin Liu & Chulan Xu
Prof. Khrystyna Vyprynyuk

Sustainable Building Envelopes

Fareda Elsherif, Mohamed Hassan, Fatima Ikhmais, Aia Mahmoud & Mariam Selim
Prof. Alexander Aptekar

Task-Specific Architectures in Multi-Agent Reinforcement Learning

Taimoor Awan, Derrick Keith & Jason Lin
Prof. Changkyu Kim

Technology Behind Self-Driving Cars

Danielle White
Prof. Marcos Pinto

Teledentistry

Alaysia Simmons
Prof. Dora-Ann Oddo

The Addiction of Social Media

Joel Burke
Prof. Amera-Rime Lulu

The Future of UI/UX in Virtual and Augmented Reality

Kevin Hutchinson
Prof. Amera-Rime Lulu

The Impact of Aging on Dental Restorations

Sarah Flores
Prof. Aneeza Hussain

The Impact of AI on Society

Kevin Balbuena Montes
Prof. Suela Aalsberg

The Impact of AI on Society

Lawrence Osowski
Prof. Elizabeth Milonas

The Impact of Climate Change on Health

Marissa Escarez
Prof. Annie Ngana Mundeke

The Impact of Moving Humans and Objects on WiFi Signals

Boming Shao
Prof. Li Geng

The Impacts of COVID-19 on High School Students

Saeni Watson
Prof. Annie Ngana Mundeke

The Intersection Between Sustainability and Accessibility

Aurora Hidalgo
Prof. Tracy Zimmermann

The Orthodontia-Oral Health Connection

Sem Lama, Cynthia Monroy,
& Alexandra-Kelly Rubiano
Prof. Khrystyna Vyprynyuk

The Study of Endometriosis and the Barriers of Healthcare

Tais Chicaiza
Prof. Lillian Amann

The Technology Behind Metamaterial (ART)

Raymond Sekyere
Prof. Marcos Pinto

The Use of Non-Traditional Shapes to Improve Natural Air Flow

Emilio Tlacomulco
Prof. Alexander Aptekar

Topics in Climate Change

Casper Chen
Prof. Annie Ngana Mundeke

U.S. Healthcare System

Hailah Nagi
Prof. Farrukh Zia

Understanding the Impact of Climate Change and Building Energy Consumption

Rashiek Barber, Abdellah Gessra, Takoda Nestor,
Christopher Sanchez & Ferasuddin Siddiqui
Prof. Daeho Kang

Use of Sensors to Control Mechatronic Devices

Rachica Jean Baptiste
Prof. Andy Zhang

Using Blockchain Technology to Safeguard Pharmaceutical Supply Chain

Melissa Garcia
Prof. Marcos Pinto

Using Machine Learning to Build a Speech Recognition App

Mohammed Imad
Prof. Marcos Pinto

Utilizing PEGDA for Sustainable Seed Growth: Microgreens in Space

Thomas Alarcon Ali, Ariel Marroquin
& Samuel Martinez
Prof. Ozlem Yasar

GRANT-FUNDED PROJECTS

NSF REU Grant # 2150432

Profs. Reginald Blake,
Hamidreza Norouzi & Ms. Julia Rivera

Analyzing Atmospheric Correction Algorithms for Climate Change Impact on Water Quality in Clear Lakes Using Landsat

Aisha Malik
Dr. Marzieh Azarderakhsh

Using Varioptic Liquid Lens Improving Laser Radar Accuracy in Insect Detection

Andrii Iarmolenko
Dr. Andrii Golovin

Wind Trajectories in an Urban Setting using Doppler LiDAR and Ancillary Ground based Remote Sensing Instrumentation

Joseph Rukaj
Dr. Viviana Vladutescu, Dr. Yonghua Wu, Dr. Thomas Legbandt & Dr. Fred Moshary

Analysis of Historical Rainfall Features of Flash Flood Events in New York City

Naureen Asha
Dr. Seonho Kim & Dr. Naresh Devineni

Estimation of Water Parameters From Ocean Remote Sensing

Rosa Pavlak
Profs. Eder Herrera Estrella
& Dr. Alexander Gilerso

We'll Fix It in Post: Deep Learning for Numerical Weather Prediction Post-Processing in Medium-Range Precipitation Prediction in the NE U.S.

Steven Aarons
Dr. Yanna Chen

Cross-instrument Validation of Aerosol Optical Properties Measurements

Tahsinur Rahman
Dr. Viviana Vladutescu, Dr. Yonghua Wu,
Dr. Thomas Legbandt & Dr. Fred Moshary

Optical Extinction and Backscatter of Aerosols in an Urban Area

Tianyi Zhao
Dr. Viviana Vladutescu, Dr. Yonghua Wu,
Dr. Thomas Legbandt & Dr. Fred Moshary

Heat Monitoring in the New York City Subway System

César Pascal Vasquez, Tyler Ayala,
Joseph Moise & Isaac M. Morel Lopez
Dr. Abdou Bah

Mapping Air Quality in New York City Using Low-Cost Air Quality Monitors

Jonathan Rubinov & Keba-Amady Nelson
Omar Addasi, Narjis Sabar
& Dr. Prathap Ramamurth

RESCUE: Resilience & Engagement for Sustainable Climates in Urban Environments

Kazi Tasin & Alijah Anyagwosi
Andrew Dixon, Richard Rivera
& Dr. Tarendra Lakhankar

CONNECT THE DOTS

PIs Dr. Jonas Reitz, Dr. Ariane Masuda,
& Dr. Kate Poirer
Grant # MSEIP Grant #P120A220033

On the Equality of Sums & Products for Certain Multisets

Hannah Bahn (St. Ann's School)
Dr. Satyanand Singh

The 41st semi-annual

Dr. Janet Liou-Mark Honors Scholars & Undergraduate Research Poster Presentation

To all the dedicated professors for mentoring students. A heartfelt thank you for making this event a successful one.

SPECIAL THANKS TO

Dr. Abdou Bah
Ms. Julie Lynch
Ms. Chioma Okoye
Mr. Michael Pamesa
Ms. Julia Rivera
Ms. Mary Zaradich

A SPECIAL THANK YOU TO THE DEDICATED POSTER JUDGES:

Ralph Alcendor
Alexander Aptekar
Marzi Azarderakhsh
Sergio Belich
Christopher Bowers
Scott Dahlie
Kayla Davie
Vitaliy Dorogan
Gaffar Gailani
Li Geng
Ivana Jovanovic
Lyubava Kroll
David Lee
Jason Longo
Elizabeth Milonas
Ngana Mundeke
Marcos Pinto
Victor Santos
Satyanand Singh
Peter Spellane
Ahmet Yuksel
Zheng Zhu

A special recognition and appreciation to Or Szyflingier for designing this program.

Organized by City Tech's Honors Scholars & Undergraduate Research Programs