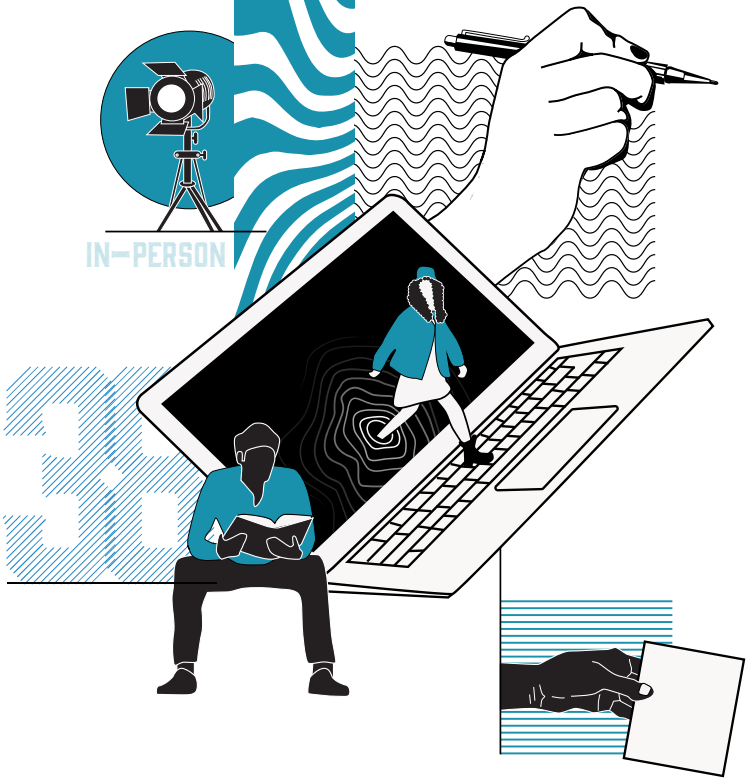


Dr. Janet Liou-Mark

The 38th Semi-Annual



HONORS & UNDERGRADUATE

RESEARCH SCHOLARS POSTER PRESENTATION

WEDNESDAY, MAY 3, 2023

POSTER PRESENTATION
(POSTER JUDGING)

THURSDAY, MAY 4, 2023

POSTER PRESENTATION
(AWARD CEREMONY)

ORGANIZED BY CITY TECH'S HONORS SCHOLARS PROGRAM

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
Director of the Honors Scholars Program

CUNY Research Scholars & Louis Stokes Alliances
for Minority Participation
Hamidreza Norouzi
Director of Undergraduate Research

Emerging Scholars
Hamidreza Norouzi

Grant-Funded Projects
Hamidreza Norouzi

Interdisciplinary Projects
Reneta D. Lansiquot
Founding Chair of the Interdisciplinary Committee

BEST POSTER AWARDS

Amanda Almond
Assistant Director of the Honors Scholars Program

HONORS IN A REGULAR COURSE

Polyethylene Glycol Diacrylate Degradation Rate Studies

Aaryan Manoj Nair

Prof. Ozlem Yasar

MECH 4700: Fluid Mechanics

Machine Learning in Finance

Akinyemi David Apampa

Prof. Satyanad Singh

MAT 4788: Financial Risk Modeling

Artificial Intelligence: A New Era

Ali Jawwad

Prof. Robert Brenner

CST 2801: Special Topics in
Information Technology

Manned Aircraft vs UAV and LiDAR

Calvin Walters

Prof. Lemuel Morrison

CMCE 2322: Surveying II

The Role of Literary Techniques and Devices in Marketing Strategies

Supriya Singh

Prof. Rebecca Mazumdar

ENG 2001: Introduction to
Literature, Fiction

Machine Learning in Finance

Elma Kastrat

Prof. Satyanad Singh

MAT 4788: Financial Risk Modeling

Validating Landsat Satellite Land Surface Temperature Estimations for Use in Urban Green Space Models: A Hypothesis Testing Approach

Ethan Peters

Profs. Holly Carley & Patricia Medina

MAT 2572: Probability and
Mathematical Statistics I

Structural Concepts in the Manhattan Bridge

Fatima Ikhmais

Prof. Ben Posel

ARCH 2481: Structures II

VirtualBox Vs Hyper-V

Gustavo Quijada, Hugh Clarke, & Paul Jachimowiz

Prof. Fangyang Shen

CST 3615: Enterprise Applications

Pocket Arduino-Based Smart Weather Station with Bluetooth Connectivity

Jason Jara

Prof. Farrukh Zia

CET 4711: Computer Controlled
System Design

An Evolving Wine Trend: Canned Wines

Kemoya Mcleod

Prof. Adrian Murcia

HMG 2402: Wine and Beverage
Management

Racial Bias in Health IT

Kimora Toussaint
Prof. David Lee
COM 3503: Health, Media and
Communication Technology

Designing, Fabrication, and Testing of a Truss

Kingston Ditsch
Prof. Kheireddine Bettahar
MECH 1234: Statics and Strength
of Materials

Reflecting on conflict management in a healthcare setting

Klaudia Jones
Prof. Kelsey Binion
COM 2403ID: Health Communication
Interdisciplinary

Hammarby Sjöstad Urban Eco-district: Lessons learned and possible implementation in NYC

Ryan Gangadin
Prof. Abraham Gonzalez
ARCH 3551: Sustainability:
History and Practice

Game Jam Game: Loops

Luke Hahn
Prof. Tamrah D. Cunningham
Mentor: Dr. Reneta D. Lansiquot
CST 4900: Internship in
Computer Systems

Climate Change and the Wine Industry

Madelyn Kelly
Prof. Adrian Murcia
HMGT 2402: Wine and Beverage
Management

Honors Recording Review Paper

Matthew Ramosa
Prof. Michael Smith
MUS 1210: Musical Styles

Achieving Net Zero Energy

Michaylah Mam
Prof. Michael Loo & Robert Zagaroli
ARCH 1231: Building Technology I

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

**Designing a Student Questionnaire to
Research Issues of Retention in the
Communication Design AAS/BFA Program**

Abdullah Momin & Frank Lema
Prof. Daniel Wong

Animal Research and Mother Cells

Fernando Santana Perez
Prof. Lubie Alatraste

Bird Identification via DNA Extraction

Jaden Burke
Prof. Olufemi Sodeinde

Business Information Security Office (BISO)

Hudda Siddique
Prof. Patrick Slattery

**Code Cyber: Using an AI model to Analyze the
Rate of Inflation in the United States within a
Statistical & Data Science Context**

Kazi Tasin
Prof. Patrick Slattery

**X-Ray & MRI Theory for Mineral-Rich Fruits
Affected by Heat Waves During Climate Change**

Somdat Kissoon
Prof. Subhendra Sarkar, Zoya Vinokur
& Lillian Amann

Deep Learning Application: Voice Recognition

Jesus Reyes
Prof. Marcos Pintos

**Development of Practical Method to Quantify
Infiltration Rate Through Building Entrance**

Steven Boodram, Loudelson Deguerre
& Ferasuddin Siddiqui
Prof. Daeho Kang

**Comparing Skin Entrance Doses in Abdominal
X-Ray With and Without Shielding**

Lauren Gordon, Liana Reid, & Ollana John
Prof. Anthony DeVito

Green and Passive Architecture Prototyping

Mohammed Jalloh
Prof. Alexander Aptekar

Green Roof Media Parametric Study Methods

Yehya Elfgeeh
Prof. Ivan Guzman

City Prime: A Heteromorphism Robot

Iqra Khan
Prof. Xiaohai Li

How Will Climate Change Affect the Future

Ashanti Belone
Prof. Farrukh Zia

**Additive Manufacturing Process Development
of Geopolymer Based Habitable Construction
on Space**

Husnain Khan
Prof. Akm Samsur Rahman

Importance of Incorporating Computer Ethics in Computer Curriculum

Tiya Williams
Prof. Elizabeth Milonas

Classifying Public Companies by Sector Using a Machine Learning Tree Model in R

Shahat Alam
Prof. Nan Li

Heat Shocked Porous Media: X-ray Experiments to Reveal Abnormal Nutrient Distribution in Mineral-Rich Fruits

Aravis McBroom, Aaliyah Salmon & Joanna Syska
Prof. Subhendra Sarkar & Eric Lobel

Lookism: An Investigation Into Discrimination in Workplace Practices

Shana Ramnarain
Prof. Alyssa Dana Adomaitis

The Impact of Climate Change

Junxi Chen
Prof. Ann Ngana Mundeke

Studying Factors of Environmental Injustice and Ways to Achieve Equity

Arham Hussain
Prof. Marzi Azarderakhsh

STEM or Social Studies: Online Education Preference Based on Subject Area

Fatimah Asad
Prof. Lubie Alatraste

Database Migration: A Study of Challenges for DBMS Users and Administrators

Rex Wong
Prof. Patrick Slattery

The Impact of Polio onto the Modern US Healthcare System

Gabriel Martinez
Prof. Jose Martinez

The Motivating Factor Towards a Career in Radiologic Technology & Medical Imaging at New York City College of Technology

Makadeer Kassim
Prof. Jennett Ingrassia

Potential Application of Alkali Halide Filters for Imaging of Key Minerals in Fresh Porous Fruits

Angela Moore & Katie Tam
Prof. Subhendra Sarkar
& Evans Lespinasse

Doorfront.org: Using NYC Open Data to Improve Accessibility for People with Mobility Impairments in New York City

Said Naqwe
Prof. Patrick Slattery

The impact of artificial intelligence on business operations

Valon Dellovci
Prof. Patrick Slattery

Augmented and Virtual Reality: Advancement of technology and its impacts on medicine, education, and other industries

Yassine Chahid
Prof. Patrick Slattery

EMERGING SCHOLARS

Polyethylene Glycol Diacrylate Degradation Rate Studies

Aaryan Nair, Freddy Ortega, Ian Simpson,
& Naeem Kotadia
Prof. Ozlem Yasar

Identity Only Politics as Technologies of Power: Latinx Population in the United States and the fight for Electoral Sway

Aayiana Marrero, Emily Bieber,
& Sahar Nasim
Prof. Xavier Alvarez

3D Printing with Lunar Geopolymer

Adrian Mckinnon
Prof. Akm Rahman

Information Systems/Technology OER Textbook Enrichment

Ahjahlia Murphy, Denitsa Dineva,
& Malak Alammari
Prof. Patrick Slattery

Beyond the Egyptian Pharaohs

Aia Mahmoud
Prof. Jieun Yang

Mirroring X ray Scattering and Epilepsy MR for Comparable Signaling – A Meta Analysis of Mirror Foci in Temporal Lobe Epilepsy: a Hard Problem in Radiology

Allison Velasquez
Prof. Subhendra Sarkar

Mapping the Campus

Alyssa Duran & Wilna Michel
Prof. Anne Leonhardt

ARCscholars

Amal Toaimah, Catherine Valenzuela,
Erickson Diaz, Kaylynn Daoud, Kevin
Valencia, & Vincent Zheng
Prof. Naomi Langer-Voss

Radiomics of Neurodegeneration in Alzheimer's: MRI, MRS & PET

Anam Riaz, Anjalee Rabbani,
& Jennifer Padilla
Profs. Subhendra Sarkar & Duke Shereen

Employment restrictions and psychosocial distress among immigrant women in the US

Annique Matthews
Prof. Smita Dewan

National Heroes of Jamaica

Antonio Forbes
Prof. Elizabeth Parks

Critical Educational AutoEthnographies

Asset Mballo & Edgar Castillo
Prof. Mery Diaz

Compton or Inelastic X-ray Scattering in the Presence of Iodinated and Gadolinium Contrast Media May Image Surface States or Texture in Bulk Animal Protein Matrix

Ayesha Arooj, Derbie Desir, & Robert O'Brien
Prof. Subhendra Sarkar

Enrollment trends in Radiologic Technology Program at City Tech for X-ray vs Others Imaging Modalities

Bich Pham
Prof. Lillian Amann

The Other Face of Social Media

Bryant Ariza
Prof. Elizabeth Parks

**The Living Breakwaters PDR Efforts:
ECONcrete Resource Analysis**

Calvin Walters Jr.
Prof. Anne Sowder

Deep Learning approach to diagnosing Cancer

Charlene Chung
Prof. Pegah Khosravi

**Exactly Solvable Two-Body Problem in
Two-Dimensional Quantum Mechanics**

Claudio Malvino, Jianning Luo
Prof. Roman Kezerashvili

**Country Tech: The Rebirthing of a Windswept
Dairy Barn in the Catskill Mountains**

Dahrel Cadore, Felix Alvarado,
& Rokhaya Ndiaye
Prof. Kenneth Conzelmann

**Potential application of alkali halide filters for
imaging of key minerals in fresh porous fruits**

Daler Djuraev
Profs. Subhendra Sarkar, Zoya Vinokur,
& Lillian Amann

Augmented Reality With Membit

Daniel Greene & Katherine Alas
Prof. Jenna Spevack

**Characterizing a Calpain gene,
TTHERM_00486970, Belonging to
Tetrahymena Thermophila**

Derbie Desir
Prof. Subhendra Sarkar

Machine Learning in Finance

Elma Kastrat
Prof. Satyanand Singh

**How is “AI” influencing our generations’
engagement in education and recruitment
systems?**

Ethan Pruzhansky, Jason Lin,
& Tanvir Rahman
Prof. Patrick Slattery

**Ethical and Social Issues in
Information Systems**

Fahima Zannat
Prof. Patrick Slattery

**Design and Implementation of a Restaurant
Website Using HTML, CSS, and JavaScript**

Fahmeda Khanom & Touheda Khanom
Prof. Farrukh Zia

Language Bias on Campus

Israt Korno, Sumiya Jahan
Prof. Lubie Alatraste

**Number Theoretic Arithmetic Functions
and Dirichlet Series**

Ivan Morozov
Prof. Satyanand Singh

**Military invasion of Ukraine and
World’s Perspective**

Jean Lucas
Prof. Elizabeth Parks

**Delusional Types in Forensic
Psychiatric Patients**

Alyssa Ramsawak, John Felix,
& Margarita Aleshka
Prof. Daniel Capruso

Control the VEX Robot With Image Processing

Justin Bartholomew
Prof. Lili Ma

Grenada Mental Restorative Space

Kada Clyne
Prof. Phillip Anzalone

**Global Radiological Technologist
Licensing Requirements**

Katelyn Lopez
Prof. Patrick Slattery

Augmented Reality with Membit

Katherine Alas
Prof. Jenna Spevack Spevack

Types of Cyber Attacks and Incident Responses

Kaung Myat Thu
Prof. Patrick Slattery

**Social Media Impact on Young Minds: The
Impact of Trends and Legislation**

Keelyany Gomzales
Prof. Patrick Slattery

Artificial Turf and Health Hazards

Le Van La
Prof. Vishwas Joshi

Opportunities in Sustainable Architecture

Ludje Henry
Prof. Elizabeth Parks

**Investigating the Taste Quality of
Hydroponic Vegetables in Culinary
Applications for Year-Round Availability**

Madelyn Kelly
Prof. Tracy Zimmermann

**Information Systems/Technology OER
Textbook Enrichment**

Malak Alammari
Prof. Patrick Slattery

**New Gender Identity in the Fashion
Global Workforce**

Malik Lee
Prof. Alyssa Dana Adomaitis

**Exploring Methods for Recycling Filament
Waste in 3D Printing**

Max Rios Carballo
Prof. Angran Xiao

**A Deep Learning Approach to Diagnostic
Classification of Prostrate Cancer Using
MR Images**

Mehnaz Hoque
Prof. Pegah khosravi

**Driving Forces behind choosing radiological
technology as a career**

Mikhail Kun, Peber De Jesus,
& Tatiana Ryzhakova
Prof. Zoya Vinokur

Applications of Sperner's Lemma

Neo Johnson
Prof. Ariane Masuda

**Fabrication of Monolayered TMX Materials for
Quantum Connectors**

Pedro Sotomayor
Prof. Vitaliy Dorogan

Brain Tumor Detection and Classification from MRI Images Using a Convolutional Neural Network Model

Raecine Greaves
Prof. Pegah Khosravi

Machine Learning Galaxy Morphology

Rene Coronel
Prof. Ari Maller

Brain tumor detection using a deep learning algorithm

Robert Texidor
Prof. Pegah Khosravi

X-ray and MRI Theory for Mineral-Rich Fruits Affected by Heat Waves During Climate Change

Robert O'Brien
Prof. Zoya Vinokur

Valence Electron Grazing- Compton Filters to Achieve Hyperspectral X-ray Imaging without Sample Overheating

Sabina Rakhmatova & Zuoni Ke
Prof. Subhendra Sarkar

Doorfront.org: Using NYC Open Data to Improve Accessibility for People with Mobility Impairments in New York City

Said Naqwe
Prof. Patrick Slattery

Open Educational Resource (OER) Textbook Update Process and Tools

Shaquan Larose
Prof. Patrick Slattery

The Golden Ratio in Architecture

Sofia Bilbao
Prof. Ariane Masuda

Job Search Skills that Needed for Data Roles

Svetlana Idrovo Shindler
Prof. Patrick Slattery

Classification of Normal versus Pneumonia from Chest X-ray Using an AI Model

Tassadit Lounes
Prof. Pegah Khosravi

Smart Gun

Tomas Biterski
Prof. Masato Nakamura

The impact of artificial intelligence on business operations

Valon Dellovci
Prof. Patrick Slattery

An Alternative Approach to Urban Renewal

Yanfang Liang
Prof. Michael Duddy

Augmented and Virtual Reality: Advancement of technology and its impacts on medicine, education, and other industries

Yassine Chahid
Prof. Patrick Slattery

Analyzing a Winning Strategy in Sperner's Game

Yitao Li
Prof. Ariane Masuda

Image Recognition Android App

Zhenghua Li
Prof. Subhendra Sarkar

GRANT-FUNDED PROJECTS

NSF IUSE GEO Grant # 2023174

**Profs. Abdou Bah, Reginald Blake,
Masato Nakamura, Hamidreza Norouzi,
& Ms. Julia River**

Investigating the Uncertainties of Forecasting NE Cold Season Precipitation in Numerical Weather Prediction Models

Anam Riaz
Mentor: Yanna Chen
Profs. Reginald Blake & Hamidreza Norouzi

Analysis of Lake Azuei Temperature Variability using MODIS Aqua Observations

Samuel Hector Leriche
Profs. Abdou Bah, Reginald Blake,
& Hamidreza Norouzi

Geological Mapping of Landfill Gas Emissions Greenhouse Gases

Richard Rohoman
Prof. Masato Nakamura

Water Quality Monitoring of Lakes Using Satellite Remote Sensing

Anthony Romero
Profs. Marzieh Azarderakhsh,
Reginald Blake, & Hamidreza Norouzi

NSF REU Grant # 1950629

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

Potential Satellite Imagery for Detecting Harmful Algal Blooms Over New York Lakes

Sulayman Konateh
Profs. Marzieh Azarderakhsh, Reginald
Blake, & Hamidreza Norouzi

Analyzing Heat Waves in New York City and Sub-urbans Using Historical Weather Station Data

Sameeha Malikah
Mentors: Stephanie Avila & Gabriella Garcia
Profs. Naresh Devineni
& Tarendra Lakhankar

Bioinformatic Identification of Interspecies Nucleotide Sequence Divergence Within Putative OTX2 Transcription Factor Binding Sites in the Thrb1CR Retinal Enhancer Element

Laure Ouoba
Mentor: Mykel Barrett
Prof. Arthur Ford

Bioinformatic Identification of Interspecies Nucleotide Sequence Divergence Within Putative OTX2 Transcription Factor Binding Sites in the Thrb1CR Retinal Enhancer Element

Nafisa Tabassum
Mentor: Mykel Barrett
Prof. Arthur Ford

Utilizing Machine Learning to Comprehend the Spatial Consistency of Floods in the United States, their Climate Correlations and Predictability

Stephen Rosario
Mentor: Ololade Alonge
Prof. Naresh Devineni

Effective, Structured, Summer Research Teams: Learning Coding Skills by Studying Neighborhood Scale Urban Heat Island Mitigation Strategies

Lillian Ameling
Mentor: Carolien Mossel
Profs. Reginald Blake & Hamidreza Norouzi

INTERDISCIPLINARY PROJECTS

Game Jam Game: Loops

Luke Hahn
Prof. Tamrah D. Cunningham
Mentor: Dr. Reneta D. Lansiquot
CST 4900: Internship in Computer Systems

Racial Bias in Health IT

Kimora Toussaint
Prof. David Lee
COM 3503: Health, Media and Communication
Technology

Reflecting on conflict management in a healthcare setting

Klaudia Jones
Prof. Kelsey Binion
COM 2403ID: Health Communication
Interdisciplinary

Achieving Net Zero Energy

Michaylah Mam
Profs. Michael Loo & Robert Zagaroli
ARCH 1231: Building Technology I

Database Migration: A Study of Challenges for DBMS Users and Administrators

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Prof. Patrick Slattery

Doorfront.org: Using NYC Open Data to Improve Accessibility for People with Mobility Impairments in New York City

Said Naqwe
Prof. Patrick Slattery

The impact of artificial intelligence on business operations

Valon Dellovci
Prof. Patrick Slattery

Augmented and Virtual Reality: Advancement of technology and its impacts on medicine, education, and other industries

Yassine Chahid
Prof. Patrick Slattery

PHYS 1002ID: Introduction to Physics of Natural Disasters Prof. Abdou Bah

EVs and the Effect on Climate Change

John Anthony, Noel Nova, Niamke Cole,
& Daniel Rojas
Prof. Abdou Bah

Turkey and Syria 2023 Earthquakes

Lukas Klertiashvili, Kester Todd,
Gordon Zheng, Sakuna Rai, Jesse Huggins,
& Anthony Romero
Prof. Abdou Bah

The 2022 Pakistan Flood: Causes and Socio-Economic Impacts

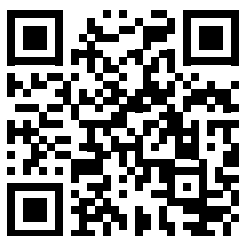
David Arriaga, Joseph Andrango,
Gamage Garusinghe, Alexis Basarte,
& Eusebe Piewe Louis
Prof. Abdou Bah

The Effects of 2022 Hurricane Ian on America Coastlines

Michaelis Photiou, Yokai Wu,
Nasrath Chowdhury, Agah Ibrahim Akram,
& Brian Bacuilima
Prof. Abdou Bah

Honors Scholars Program

Student Academic Conference



**What the Tides May Bring:
Place, Identity and Environmental Justice**

**Where: A105- New Academic Building
When: May 4th, 9am-12:30pm**



**Dr. Ryan
Mann-Hamilton**

Don't miss Dr. Ryan Mann-Hamilton as he speaks about social and environmental justice, the cultural history of Afro-Latinos, and community-based activism.

**THE 38TH SEMI-ANNUAL
DR. JANET LIOU-MARK HONORS AND UNDERGRADUATE
RESEARCH SCHOLARS POSTER PRESENTATION**

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

SPECIAL THANKS TO

Prof. Abdou Bah
Mr. Ryan Chen
Prof. Tamrah D. Cunningham
Mr. John Momeni
Ms. Chioma Okoye
Ms. Kimberly Ramgopal
Ms. Julia Rivera

**A SPECIAL THANK YOU TO THE DEDICATED
POSTER JUDGES:**

Marzi Azarderakhsh	Nandi Prince
Yu-wen Chen	Meg Ray
Tamrah Cunningham	Noemi Rodriguez
Susan Davide	Alba Rossi-George
Nanette Johnson	Satyanand Singh
Ivana Jovanovic	Mary Tedeschi
Ellen Kim	Zoya Vinokur
David Lee	Khrystyna Vyprynyuk
Alberto Martinez	Robert Walljasper
Elizabeth Milonas	Tracy Zimmermann
Annie Ngana	

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