College of Engineering and Computing
LONG NGUYEN AND KIMMY DUONG SCHOOL OF COMPUTING
George Mason University



1st Long Nguyen and Kimmy Duong School of Computing PhD Research Symposium

Lightning talks, research posters, and the Digital Research Gallery from Computer Science, Information Sciences & Technology, and Statistics

Friday, November 6, 2026 · 12:00–4:45 PM

Nguyen Engineering Building · George Mason University, Fairfax Campus

PROGRAM

Schedule

FRIDAY, NOVEMBER 6

12:00 – 1:15	**Check-in, lunch, and poster drop-off** Check in on the 2nd floor. Registered guests pick up a boxed lunch from ENGR 1602 with their lunch ticket. Poster presenters: posters to Room 1103 by 1:00 PM.	2nd floor · 1602 Atrium · 1103
1:15 – 1:25	**Move to the Auditorium**	Jajodia Auditorium
1:25 – 1:40	**Opening remarks** Lily Wang, Associate Dean for Graduate Studies, host · Gurdip Singh, Divisional Dean, School of Computing	Jajodia Auditorium
1:40 – 3:10	**Lightning talks** 15 five-minute talks (T1–T15), strictly timed, no Q&A between talks. Overflow seating with a live feed in ENGR 1109. Vote for your favorite talk by 3:20.	Jajodia Auditorium
3:15 – 4:15	**Poster session and judging** Posters P1–P25 in the Atrium and P26–P33 in Room 1103, all three departments in both rooms. Digital Research Gallery on the Atrium screens. Refreshments next to Room 1103.	Atrium · 1103
4:15 – 4:25	**Move to the Auditorium** Poster voting closes at 4:15 (talk voting closed at 3:20).	Jajodia Auditorium
4:25 – 4:45	**Awards and closing** Advisors of award recipients join their students on stage.	Jajodia Auditorium

By the numbers. 107 abstracts submitted · 15 talks · 33 posters · 38 digital posters in the gallery · 211 registered

Rooms. Jajodia Auditorium, Atrium, and Room 1103 are on the first floor, a few steps from one another. ENGR 1602 (lunch pickup and event headquarters) and ENGR 1109 (overflow) are also on the first floor. Check-in is on the second floor.

Lightning Talks

1:40 – 3:10 · JAJODIA AUDITORIUM

Five minutes each, in the order below. Talk numbers (T1–T15) are shown on screen and are what you use to vote for the People's Choice award (page 8).

T1 **Prommy Sultana Hossain** CS
Selective Forgetting in Deep AI Systems via Machine Unlearning
Advisor: Jessica Lin

T2 **Anjishnu Mukherjee** CS
MAPLE: Metadata Conditioned LLM Pretraining for Locale-Aware Question Answering
Advisors: Antonios Anastasopoulos, Ziwei Zhu

T3 **Sthitadhi Sengupta** CS
From Fireground to Remote Presence: Firefighters' Practices and Design Opportunities for Immersive Human-Humanoid Teleoperation
Advisor: Bo Han

T4 **Ahnaf An Nafee** CS
FlowGate: Can a Cycling Game Learn How Absorbed You Feel?
Advisor: Lap-Fai Yu

T5 **Morayo Ogunsina** CS
Determinized-Guided Planning for Multi-Robot Multi-Goal Navigation in Risky Environments
Advisor: Gregory J. Stein

T6 **Ruizhe Shi** CS
Towards a Faster Decentralized Web
Advisor: Songqing Chen

T7 **Ruochen Wang** CS
How Agents Impact Program Comprehension
Advisor: Thomas LaToza

T8 **Amir Hossain Raj** CS
PIVOT: Teaching Humanoid Robots to Collaborate in Tight Spaces
Advisor: Xuesu Xiao

Lightning Talks

T9 **Chahat Raj** CS
Debias It Yourself: Teaching LLMs Cognitive Bias-Mitigation Interventions
Advisors: Ziwei Zhu, Antonios Anastasopoulos

T10 **Zifan Qu** CS
TENNOR: Trustworthy Execution for Neural Networks through Obliviousness and Retrievals
Advisors: Evgenios Kornaropoulos, Giuseppe Ateniese

T11 **Dongqi Fu** STAT
A Framework for Two-Stage Enrichment Trial Designs
Advisors: William F. Rosenberger, Wanli Qiao

T12 **Ziqiao Xu** STAT
Experimental Designs for Electric Bus Routes
Advisor: Nicholas Rios

T13 **Tong Li** IST
How Many Times Should You Run a Quantum Program? Planning Measurement Budgets for Cloud Quantum Computing
Advisor: Lei Yang

T14 **Zinat Ara** IST
Understanding Body Doubling for Adults with ADHD: From Human Co-Presence to AI-driven Opportunities
Advisor: Sungsoo Ray Hong

T15 **Anudeep Vurity** IST
Towards Practical and Trustworthy Finger Photo Presentation Attack Detection on Smartphones
Advisors: Zhisheng Yan, Massimiliano Albanese

Posters

3:15 – 4:15 · ATRIUM, P1–P10

Find a poster by its board number (P1–P33). Posters from all three departments are mixed across the Atrium and Room 1103. Judges visit every poster; everyone in the room votes for the People's Choice award with the poster QR code on page 8.

P1 **Bowen Cui** CS
TileArena: Cross-Accelerator Benchmarking of Tile-Centric Programming and Optimization
Advisor: Keren Zhou

P2 **Zhihao Zhang** CS
Convex-Mirror-Based Robot Planning in Partially Observable Environments
Advisor: David Porfirio

P3 **Ataf Fazledin Ahamed** CS
Do We Need to Know the Vulnerability? Blocking Unauthorized OS Command Execution in Java
Advisor: Xinyuan Wang

P4 **Daehyun Lee** CS
DiscoFI: Discovering Safety-Critical Faults of Autonomous Driving Systems through Two-Phase Fault Injection
Advisor: Lishan Yang

P5 **Yong Cheng** CS
Surface Reconstruction from Signed Distance Fields
Advisor: Yotam Gingold

P6 **Zainab Shamim** IST
How Can EMS Be More Effective in Healthcare Through Co-Designing Technology: A Lesson from the ET3 Case
Advisor: Myeong Lee

P7 **Junming Chen** CS
Tracking You from a Thousand Miles Away! Turning a Bluetooth Device into an Apple AirTag Without Root Privileges
Advisors: Qiang Zeng, Lannan Luo

P8 **Yike Li** CS
EdgeSplat: 3D Gaussian Splatting with Memory-Efficient Streaming Inference
Advisor: Shuochao Yao

P9 **Yuang Zhang** CS
Speakeasy: Auditing Cheap Signals in Peer Prediction
Advisor: Fang-Yi Yu

P10 **Suzzana Rafi** CS
A Dataset of Reproducible Flaky-Test Failures
Advisor: Wing Lam

Posters

ATRIUM, P11–P21

P11 **Amrita Ganguly** IST
Uncovering Students' Mental Models of Generative AI Use
Advisor: Aditya Johri

P12 **Yuze Liu** IST
Modeling Analyst Events in Continuous Time for Next-Event Prediction and Interpretable Stock Ranking
Advisors: Ozlem Uzuner, Duoduo Liao

P13 **Ebtesam Al Haque** CS
What makes software issue resolution tasks difficult for agents?
Advisor: Brittany I Johnson-Matthews

P14 **Shiwei Hong** CS
Can AI Read the Room? Social and Cultural Intelligence in AI
Advisor: Zhicong Lu

P15 **Minghao Hu** CS
Zero-Shot Vulnerability Detection in Low-Resource Smart Contracts Through Solidity-Only Training
Advisor: Lannan Luo

P16 **Ziyang Ye** STAT
Partial Transfer Learning for High-Dimensional Linear Regression
Advisor: Abolfazl Safikhani

P17 **Mirza Kamrul Bashar Shuhan** CS
Oblivious Signaling
Advisors: Foteini Baldimtsi, Giuseppe Ateniese

P18 **Supriya Khadka** IST
The User Is Gone, the System Remains: Post-User Security and Digital Governance After Death
Advisor: Sanchari Das

P19 **Hossein Salemi** IST
Socially-Aware Reasoning of AI Agents in Domain-specific Natural Language Understanding Tasks
Advisor: Hemant Purohit

P20 **Jolypich Pek** STAT
Towards Automated EOS Modeling of Chemically Dissociating Materials via Latent Molar Mass Inference
Advisor: Ben Seiyon Lee

P21 **Yichang Xiong** CS
AVP-Inspect: Coordinated Cyber-Physical Testing for Privacy Analysis of COTS Apple Vision Pro Applications
Advisor: Xiaokuan Zhang

Posters

ATRIUM P22–P25 · ROOM 1103, P26–P33

ATRIUM

P22–P25

P22 **Rezoan Ahmed Nazib** CS
Echofusion: Learning 3D Scene Occupancy from Multi-Static Radar Signals
Advisor: Parth Pathak

P23 **Yufan Zhang** CS
Pixel Cube: Diffusion-based Portrait Video Relighting Through Realistic Lighting Reproduction
Advisor: Jinwei Ye

P24 **Anh Thuan Tran** CS
SettleSplat: Monocular Gaussian Mapping under In-View Scene Changes
Advisor: Jana Kosecka

P25 **Wenrui Zhao** IST
In-baggage material detection with commodity mmWave radar
Advisor: Xiaonan Guo

ROOM 1103

P26–P33

P26 **Alphaeus Dmonte** IST
SUNDER: Selective Unmasking for Text Understanding
Advisor: Marcos Zampieri

P27 **Archange Giscard Destiné** CS
Decision Guidance for Optimal Visibility-Aware Path Planning in 3D Terrain
Advisors: Alexander Brodsky, Xuesu Xiao

P28 **Luca Guida** CS
Smaller, Smarter, Faster: Mapping Human Smuggling Networks from Court Records
Advisor: Carlotta Domeniconi

P29 **Rajendra Paudyal** CS
D2M: Direct-To-Mobile multicast/broadcast over 5G NR
Advisor: Duminda Wijesekera

P30 **Tengyu Song** STAT
HellingerIEP: Making Machine Learning More Reliable When Data Changes
Advisors: David Kepplinger, Anand N. Vidyashankar

P31 **Quan Nguyen** CS
Privacy Without Utility Loss via Closed Sampling
Advisor: Dov Gordon

P32 **Hao Yan** CS
Interpreting and Steering for Safe and Correct Code Generation
Advisor: Ziyu Yao

P33 **Anthony Givans** CS
FlashBoB: I/O-Efficient Exact Backward-over-Backward for Softmax Attention
Advisor: Mingrui Liu

Awards

PRESENTED 4:25 · JAJODIA AUDITORIUM

Outstanding Oral Presentation
Three awards, selected by the judging panel from the 15 lightning talks.

Outstanding Poster Presentation
Three awards, selected by the judging panel from the 33 posters.

Digital Innovation Impact Award
Two awards, one talk and one poster, selected by the Institute for Digital Innovation (IDIA) for research with the potential to shape digital innovation.

People's Choice Award
Two awards, one talk and one poster, chosen by everyone attending. Vote below.

Honorable Mention
At the discretion of the scoring team, for talks or posters.

VOTE FOR THE PEOPLE'S CHOICE AWARDS

Best lightning talk
One vote per person, by talk number (T1–T15).
Open during the talks; closes 3:20.

Best poster
One vote per person, by board number (P1–P33).
Open during the poster session; closes 4:15.

How judging works. Judges score each talk and poster on four criteria from 0 to 5: presentation, significance, innovation, and approach. Talks are scored by the full panel; each poster is visited by at least two judges. A scoring team of three faculty, one from each department, verifies the scores, breaks ties, and decides honorable mentions.

Judging Panel

12 JUDGES

Adriana Bonilla
Arlington Economic Development

Megan Herceg
Institute for Digital Innovation, George Mason University

Dong-Yun Kim
National Institutes of Health

Balázs Nagy
NewPush

Manziba A. Nishi
Department of Information Sciences and Technology, George Mason University

Ed Oughton
Department of Geography and Geoinformation Science, George Mason University

Dieter Pfoser
Department of Geography and Geoinformation Science, George Mason University

Abolfazl Safikhani
Department of Statistics, George Mason University

Bin Wang
U.S. Food and Drug Administration

Jinwei Ye
Department of Computer Science, George Mason University

Jie Zhang
Department of Physics and Astronomy, George Mason University

Zhuangdi Zhu
Department of Cyber Security Engineering, George Mason University

SCORING TEAM

Ray Bai Statistics · **Mingxuan Yao** Information Sciences & Technology · **Xiaokuan Zhang** Computer Science

Digital Research Gallery

38 POSTERS

The Digital Research Gallery is the School's online showcase of this year's doctoral research. It plays on the Atrium screens during the poster session and will be published online after the symposium; posters whose authors chose not to publish are shown on site only. The 38 posters:

- **33** posters from today's program (pages 5–7)
- **1** poster from a lightning-talk presenter — Ahnaf An Nafee (T4)
- **4** posters from students whose work is not on today's program:

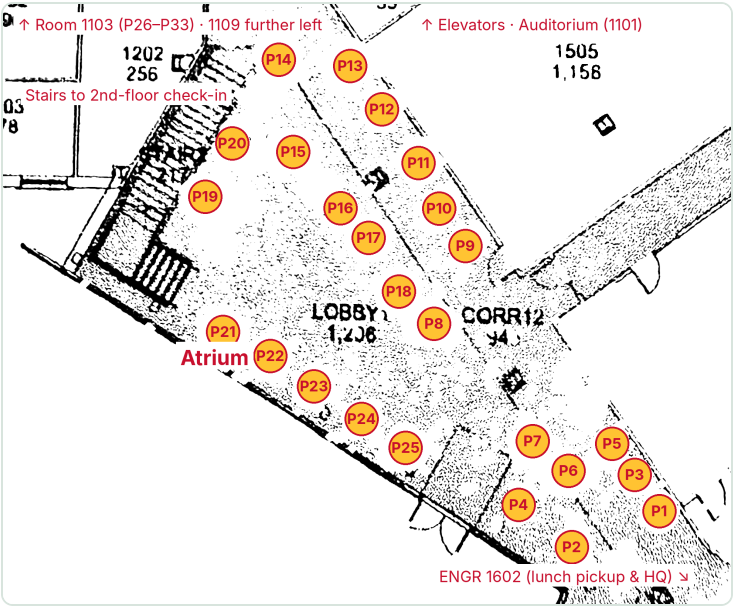
Jia Cai
Occam's Slow Razor: Exact Cancellation and the Pruning Dynamics of ARD in Gaussian Process Regression

Dhiman Goswami
Privacy-Preserving, User-Centered Language Model to Detect Transliterated Offensive Social Media Content

Fahim Arsad Nafis
A Web-Based Toolkit for Collaborative Immersive Visualization and Analytics of Scientific Data.

Siddharth Das Sarkar
TACTIC_SMS: Agentic SMS Phishing Detection with Evidence-Guided Tool Use

Finding Your Way



First-floor plan of the Atrium (Lobby 1) with poster boards P1–P25. The corridor past P1 leads to ENGR 1602 (lunch pickup and headquarters). Room 1103, with posters P26–P33, is at the top-left corner, to the left of the Auditorium; ENGR 1109 (overflow seating) is further left along the same side.

Check-in. Second floor. Pick up your name tag and lunch ticket there before heading to lunch or the Atrium.

Lunch. Boxed lunches are picked up from ENGR 1602, 12:00–1:15, with the lunch ticket from check-in; eat in the Atrium or wherever you like.

Posters. Presenters, bring your poster to Room 1103 by 1:00 PM; staff will help you find your board. Push pins are provided.

Voting. Scan the QR codes on page 8. One vote for a talk (T number) and one for a poster (P number) per person. Talk voting closes at 3:20, poster voting at 4:15.

Address. Nguyen Engineering Building (campus building #38), 4511 Patriot Circle, Fairfax, VA 22030.

Parking. Visitors should park in the Shenandoah Parking Deck (closest to the Engineering Building) or the Rappahannock Parking Deck, and pay with the ParkMobile app or at the kiosk by the deck elevators. Details: transportation.gmu.edu/parking.

Wi-Fi. MASON-SECURE with your Mason login; guests use the MASON network.

Questions on the day. Ask anyone wearing a staff badge, or go to ENGR 1602.

Directions
Google Maps to 4511 Patriot Circle

Visitor parking
transportation.gmu.edu/parking

With Thanks

ORGANIZING COMMITTEE, STAFF, AND SPONSORS

ORGANIZING COMMITTEE

Lily Wang Chair · Professor and Associate Dean for Graduate Studies
Massimiliano Albanese Professor and Associate Chair for Research, Information Sciences & Technology
Hakan Aydin Professor and Program Director, Computer Science
Ray Bai Assistant Professor, Statistics
Myeong Lee Associate Professor, Information Sciences & Technology
Mingxuan Yao IST representative on site · **Xiaokuan Zhang** CS representative on site

EVENT STAFF

Sue Johnson Event coordinator, Statistics · **Cody Salenga** Statistics
Beth Posocco, **Lauren Nyilas**, **Alyssa Tsukamoto** Computer Science
Sameera Nabizada, **Aritra Das** Information Sciences & Technology
Rachel Kranz, **Mary Stief**, **Lizzie Barnfield** Dean's Office

SPECIAL THANKS

College of Engineering and Computing, George Mason University
Gurdip Singh Divisional Dean, School of Computing
Songqing Chen Chair, Computer Science · **Ozlem Uzuner** Chair, Information Sciences & Technology · **Jiayang Sun** Chair, Statistics
Elizabeth Pickard Dean Manager, Administration and Strategic Projects
Kim Goodwin-Slater Chief Business Officer
Martha Bushong Senior Director, Communications & External Relations
Institute for Digital Innovation, George Mason University
Massimiliano Albanese Executive Director

THANK YOU

To the judges who gave their afternoon, the advisors behind every presentation, the College of Engineering and Computing for sponsoring the symposium and its awards, and the Institute for Digital Innovation for sponsoring the Digital Innovation Impact Awards.

ADVISORS OF TODAY'S PRESENTERS

Massimiliano Albanese, Antonios Anastasopoulos, Giuseppe Ateniese, Foteini Baldimtsi, Alexander Brodsky, Songqing Chen, Sanchari Das, Carlotta Domeniconi, Yotam Gingold, Dov Gordon, Xiaonan Guo, Bo Han, Sungsoo Ray Hong, Brittany I Johnson-Matthews, Aditya Johri, David Kepplinger, Evgenios Kornaropoulos, Jana Kosecka, Thomas LaToza, Wing Lam, Ben Seiyon Lee, Myeong Lee, Duoduo Liao, Jessica Lin, Mingrui Liu, Zhicong Lu, Lannan Luo, Parth Pathak, David Porfirio, Hemant Purohit, Wanli Qiao, Nicholas Rios, William F. Rosenberger, Abolfazl Safikhani, Gregory J. Stein, Ozlem Uzuner, Anand N. Vidyashankar, Xinyuan Wang, Duminda Wijesekera, Xuesu Xiao, Zhisheng Yan, Lei Yang, Lishan Yang, Shuochao Yao, Ziyu Yao, Jinwei Ye, Fang-Yi Yu, Lap-Fai Yu, Marcos Zampieri, Qiang Zeng, Xiaokuan Zhang, Keren Zhou, Ziwei Zhu

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Office of Research, Innovation, and Economic Impact
INSTITUTE FOR DIGITAL INNOVATION
George Mason University



THE ATRIUM, NGUYEN ENGINEERING BUILDING · POSTER SESSION

Thank you for joining us

The School of Computing's first PhD Research Symposium brought together 107 submissions and 211 registered guests. Thank you to every student who shared their research, and to the faculty, judges, staff, and partners who made the day possible.

The Digital Research Gallery will be published online after the symposium, and we look forward to seeing you at the 2nd SoC PhD Research Symposium in 2027.

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