

NAISE All-Hands Technical Meeting 2025

Information Booklet

September 11, 2025

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Speakers and Breakout Leaders..... Pages 4 - 6

VENUE

Northwestern, Evanston Campus

Main Room

Technological Institute, Room LR3 (L 151)
2145 Sheridan Rd.
Evanston, IL, 60208
[Tech Room Finder](#)

Lunch & Breakouts

NAISE HQ, Hogan Building, Suite 1-160
2205 Tech Drive, Evanston, IL, 60608
<https://maps.northwestern.edu/facility/88>

Afternoon Additional Breakout

Silverman Hall, Room 2-510
2170 Campus Dr., Evanston, IL, 60608
<https://maps.northwestern.edu/facility/276>

PARKING

Northwestern North Parking Garage*

2311 N. campus Drive, Evanston, IL, 60208
<https://maps.northwestern.edu/facility/646>
**once at event, please ask for a validation ticket*

NAISE CONTACTS

Technical:

Begum Gulsoy – Director of Research
e-gulsoy@northwestern.edu

Logistics:

Iustitia Ko – Program Assistant
iustitia.ko@northwestern.edu

FINAL AGENDA

NAISE All-Hands Technical Meeting

September 11, 2025 @ Northwestern – Evanston Campus

All Times CST

Location [@Main Room] unless otherwise noted

08:45AM – 09:05AM Breakfast & Registration

09:05AM – 09:10AM Welcome

09:10AM – 09:30AM **NAISE Overview & Vision**

Neelesh Patankar, *Northwestern*

09:30AM – 09:40AM **Programmatic Updates & Reminders**

Begum Gulsoy, *Northwestern*

09:40AM – 09:55AM **Topical Keynote: Autonomous Labs, Discovery, and Robotics**

Ilke Arslan, *Argonne* (Virtual)

09:55AM – 10:10AM **Topical Keynote: Quantum Science**

Quantum-HPC: Where We're At And Where We're (Likely) Headed

Laura Schulz, *Argonne*

10:10AM – 10:30AM Coffee Break

10:30AM – 10:45AM **Topical Keynote: Microelectronics**

Argonne Microelectronics Institute

Amanda Petford-Long, *Argonne*

10:45AM – 11:00AM **Topical Keynote: Water Sensing, Filtration and Critical Materials**

A New Way To Think About Water:

Rapidly Quantifying Human Experiences For Maximizing Impact

Sera Young, *Northwestern*

11:00AM – 11:10AM Coffee Break

11:10AM – 12:00PM **Parallel Breakouts**

Session 1:

Quantum Science

Leads: Kate Smith & Nikos Hardavellas, *Northwestern*

Session 2 [@NAISE HQ]:

Water Sensing, Filtration and Critical Materials

Leads: Aaron Packman & Sera Young, *Northwestern*

12:00PM – 01:10PM **Lunch & Networking [@NAISE HQ]**

01:10PM – 01:40PM **Topical Keynotes: AI Models and Applications**
Northwestern Network for Collaborative Intelligence
Abel Kho, *Northwestern*

AI for National Security
V. S. Subramanian, *Northwestern*

01:40PM – 01:55PM Walk to Breakouts

01:55PM – 02:55PM **Parallel Breakouts**
Session 3:
Autonomous Labs, Discovery and Robotics
Lead: Kevin Lynch, *Northwestern*

Session 4 [@NAISE HQ]:
AI Models and Applications
Lead: Mathew Cherukara, *Argonne*

Session 5 [@Silverman 2-510]:
Microelectronics
Lead: Mark Hersam, *Northwestern*

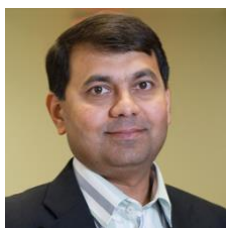
02:55PM – 03:15PM Walk back to main room & break

03:15PM – 03:40PM Report Outs

03:40PM – 04:00PM Action Items & Next steps

04:00PM *Adjourn*

SPEAKERS AND BREAKOUT LEADS [Listed in order of agenda]



Neelesh Patankar | Northwestern

NAISE Co-Director

Professor, Department of Mechanical Engineering

[Link to bio / interests](#)



Begum Gulsoy | Northwestern

NAISE Director of Research

Research Associate Professor, Department of Materials Science and Engineering

[Link to bio / interests](#)



Ilke Arslan | Argonne

Deputy Associate Lab Director

Physical Sciences and Engineering Directorate

[Link to bio / interests](#)

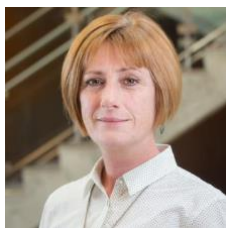


Laura Schulz | Argonne

Project Lead for Innovation

Argonne Leadership Computing Facility

[Link to bio / interests](#)



Amanda Petford-Long | Argonne

NAISE Co-Director

Director, Argonne Microelectronics Institute

Director, Materials Science and Engineering Division

[Link to bio / interests](#)



Sera Young | Northwestern

Co-Director, Northwestern Center for Water Research
Professor, Department of Anthropology

[Link to bio / interests](#)



Kate Smith | Northwestern

Assistant Professor, Department of Computer Science

[Link to bio / interests](#)



Nikos Hardavellas | Northwestern

Professor, Departments of Computer Science & Electrical and Computer Engineering

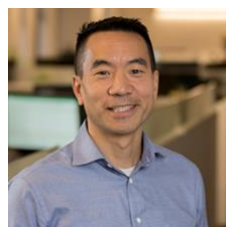
[Link to bio / interests](#)



Aaron Packman | Northwestern

Co-Director, Northwestern Center for Water Research
Professor, Department of Civil and Environmental Engineering

[Link to bio / interests](#)



Abel Kho | Northwestern

Co-Director, Northwestern Network for Collaborative Intelligence
Director, Institute for Artificial Intelligence in Medicine
Professor, Departments of Medicine & Preventive Medicine

[Link to bio / interests](#)



V. S. Subrahmanian | Northwestern

Co-Director, Northwestern Network for Collaborative Intelligence
Professor, Department of Computer Science

[Link to bio / interests](#)



Kevin Lynch | Northwestern

Director, Northwestern Center for Robotics and Biosystems
Professor, Department of Mechanical Engineering

[Link to bio / interests](#)



Mathew Cherukara | Argonne

Group Leader & Computational Scientist, Computational Science and AI Group
Advanced Photon Source

[Link to bio / interests](#)



Mark Hersam | Northwestern

Chair & Professor, Department of Materials Science and Engineering
Director, Materials Research Science and Engineering Center (MRSEC)

[Link to bio / interests](#)
