# 2025 SIAG/CSE

SIAM Conference on Computational Science and Engineering

Computational Science and Engineering Activity Group Business Meeting

Wednesday, March 5<sup>th</sup>, 6:15 - 7:00 pm Sundance 3, Omni Fort Worth Convention Center

2025 SIAG/CSE BUSINESS MEETING



# SIAG/CSE Officers

#### Chair:

Julianne Chung

\*

### **Vice Chair:**

**Edmond Chow** 

\*

### **Program Director:**

Sarah Knepper

\*

### **Secretary**:

Benjamin Peherstorfer

# SIAG/CSE Thank you to all 2023/2024 Officers

### **Chair:**

Judith Hill

\*

### **Vice Chair:**

Philipp Birken

\*

### **Program Director:**

**Edmond Chow** 

\*

### **Secretary:**

Sara Pollock

# **SIAG/CSE** Announcements

- SIAM Engage:
  - https://engage.siam.org/communities/siag-csehome?CommunityKey=2ae89a07-dad8-4ead-8cc6-bf67efd6a05c
- SIAG/CSE websites:
  - https://www.siam.org/membership/activity-groups/detail/computationalscience-and-engineering
  - https://siagcse.github.io/
- SIAM News: Story Ideas
- SIAM Blogs
- SIAG/CSE Leadership Suggestion Form:
  - https://www.siam.org/get-involved/connect-with-a-community/activity-groups/activity-group-leadership-suggestion/

# **SIAG/CSE** Fellows

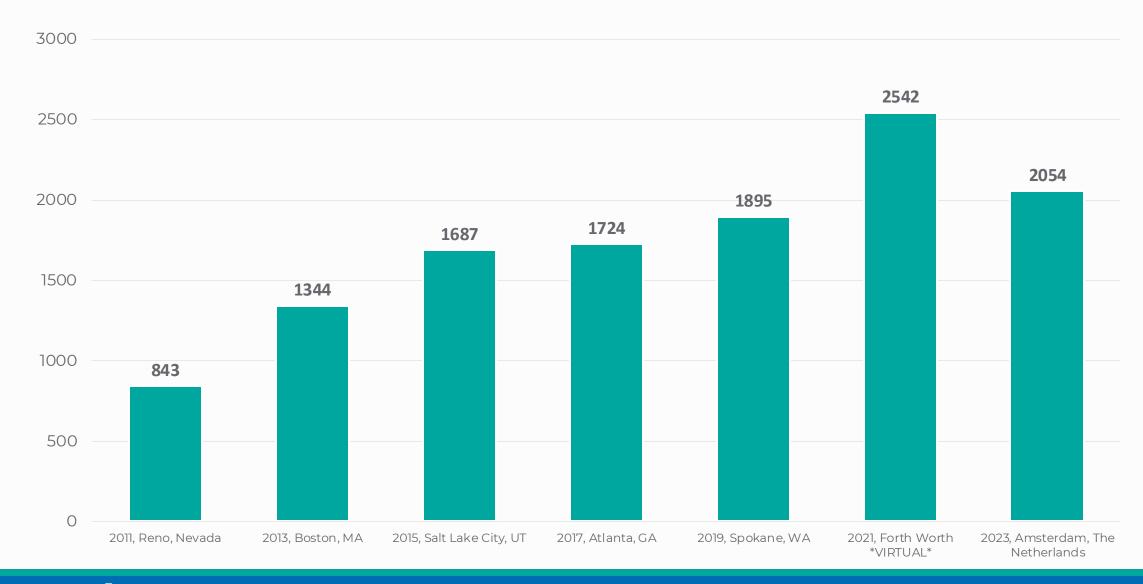
### Class of 2023

George Biros
Daniela Calvetti
Alina Chertock

### Class of 2024

**David Bindel** Hans de Sterck Aaron Fogelson Michael Friedlander Carola-Bibiane Schönlieb Luis Nunes Vicente Chao Yang Ulrike Meier Yang

# **SIAG/CSE** Conference History



#### **Organizing Committee Co-Chairs**

**David Bindel,** Cornell University, U.S. **Elizabeth Cherry,** Georgia Institute of Technology, U.S. **Judith Hill,** Lawrence Livermore National Laboratory, U.S.

#### **Organizing Committee**

Orly Alter, University of Utah, U.S.

Bubacarr Bah, African Institute for Mathematical Sciences, Gambia

Diego del Castillo-Negrete, Oak Ridge National Laboratory, U.S.

Amr El-Bakry, ExxonMobil Upstream Integrated Solutions, U.S.

Malena Espanol, Arizona State University, U.S.

**Silke Glas,** University of Twente, Netherlands

Jeff Hammond, NVIDIA, Finland

Boris Kramer, University of California San Diego, U.S.

Alicia Klinvex, US Naval Nuclear Laboratory, U.S.

Mary Ann Leung, Sustainable Horizons Institute, U.S.

Nicholas Malaya, AMD, U.S.

Christopher Marcotte, University of Durham, United Kingdom
Paulina Sepulveda Salas, Pontificia Universidad Catolica De Valparaiso, Chile
Cynthia Phillips, Sandia National Laboratories, U.S.
Tetsuya Sakurai, University of Tsukuba, Japan

### **SIAG/CSE** Best Paper Prize

#### Tensor-Tensor Algebra for Optimal Representation and Compression of Multiway Data

Monday, March 3<sup>rd</sup>, 1:10 PM – 1:40 PM

Room: Ballroom AB

Chair: Julianne Chung, Emory University, U.S.



From left to right: Haim Avron, Elizabeth Newman, and Lior Horesh

Misha E. Kilmer Tufts University, U.S.

**Lior Horesh** *IBM Research, U.S.* 

**Haim Avron** *Tel Aviv University, Israel* 

Elizabeth Newman Emory University, U.S.

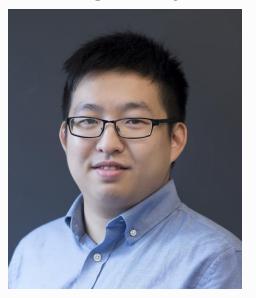


Misha E. Kilmer

### **SIAG/CSE Early Career Prize**

Solving High-Dimensional Partial Differential Equations using Deep Learning: Original Insights and Recent Progress

Monday, March 3<sup>rd</sup>, 1:40 PM – 2:10 PM Room: Ballroom AB Chair: Julianne Chung, *Emory University, U.S.* 



**Jiequn Han** *Flatiron Institute, U.S* 

#### **SIAM Travel Awards**

SIAM Operating Funds & Donations from SIAM community.

Thank you to our donors!

https://siam.org/donate

# 74 Travel Award Recipients

- 48 U.S. Students
- 13 Non-U.S. Students
- 13 Early Career Researchers

SIAM is currently accepting travel award applications for 2025 conferences – **full-time students** and **U.S.-based early career researchers** are encouraged to apply!

Learn more: https://www.siam.org/conferences-events/conference-support/travel-and-registration-support/



July 28<sup>th</sup> – August 1<sup>st</sup>, 2025 Montréal Convention Center Montréal, Québec, Canada



The Annual Meeting provides a broad view of the state of the art in applied mathematics, computational and data science, and their applications through invited presentations, prize lectures, minitutorials, minisymposia, contributed presentations, and posters.

#### **Organizing Committee Co-Chairs**

**Sue Ann Campbell**, University of Waterloo, Canada **Arvind K. Saibaba**, North Carolina State University, U.S.



# SIAM Conference on Computational Science and Engineering (CSE27)



February 22<sup>nd –</sup> 26<sup>th</sup>, 2027 Pittsburgh, Pennsylvania, U.S.

The Call for Participation is scheduled to be posted **April 2026** 

# Gene Golub SIAM Summer School (G2S3)

# Frontiers in multi-dimensional pattern formation

August 4<sup>th</sup> - 15<sup>th</sup>, 2025 Concordia University, Montreal, Quebec, CA This summer school will study the current frontiers of research in the mathematical study of patterns, with a particular emphasis on the study of patterns in multiple space dimensions. Planned courses will highlight the important aspects of the known theory (mainly focusing on developments in the past 20 years), while providing a springboard for students to begin work in the frontiers of the field.



SIAM will be accepting proposals for the 2027 school in the fall

For more information visit: https://www.siam.org/students-education/programs-initiatives/gene-golub-siam-summer-school



## Join SIAM Today!

### Benefits of SIAM Membership Include......

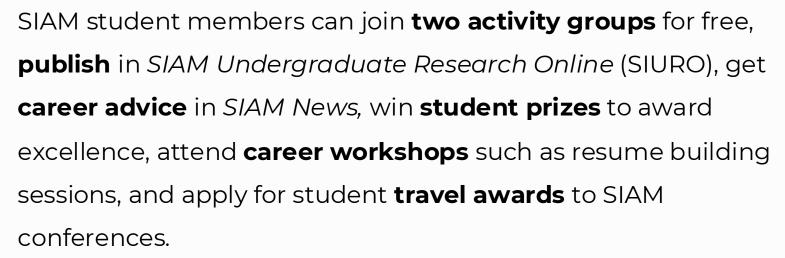
- SIAM Review (Print & Electronic)
- SIAM News (Print)
- 30% Off SIAM Books
- \$15 / Activity Group Membership
- 20% 30% Off Registrations
- 80% Off Journals (up to 4)
- 95% Off e-Access to Journals
- Spouse may join as Associate Member
- SIAM Unwrapped

- Vote in SIAM Elections
- Eligible to Hold Office
- Eligible for Committee Appointments
- Nominate SIAM Fellows
- Be Nominated as a SIAM Fellow
- Eligible for Group Insurance
- Nominate 2 Students for Free Membership
- Qualifying Student Members can join 2 SIAGs for free!
- SIAG membership FREE for one year

# Already a member?

### Nominate student members!

SIAM nonstudent members in good standing can nominate up to **two students per year** for **free membership** in SIAM.



To nominate students, scan the QR code or visit: https://www.siam.org/membership/nominate-a-student-for-complimentary-siam-membership/





### **SIAM Journals**

SIAM's 18 journals are all available for download on SIAM's virtual library, epubs.siam.org. SIAM's virtual library is the definitive source for the final, peer-reviewed version of every published article, so be sure to utilize it!

Questions about using <u>epubls.siam.org</u>? Contact <u>sales@siam.org</u> for a user guide and personal assistance!



# Future conferences?

LOCATION

DATES

**THEMES** 

# **2025 SIAG/CSE**

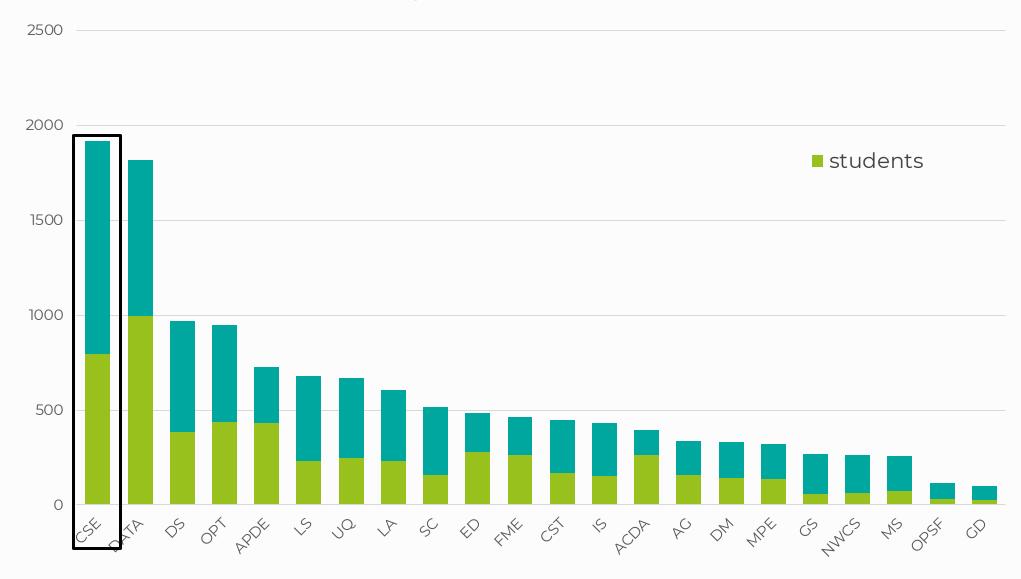
# Membership Report

(data as of December 31, 2024)

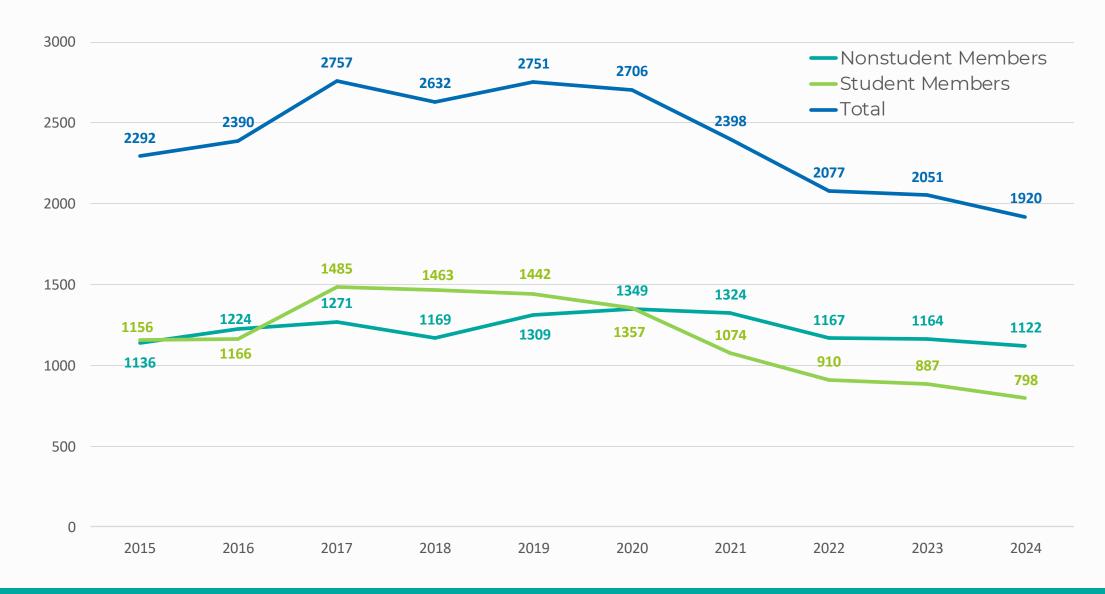
2025 SIAG/CSE BUSINESS MEETING



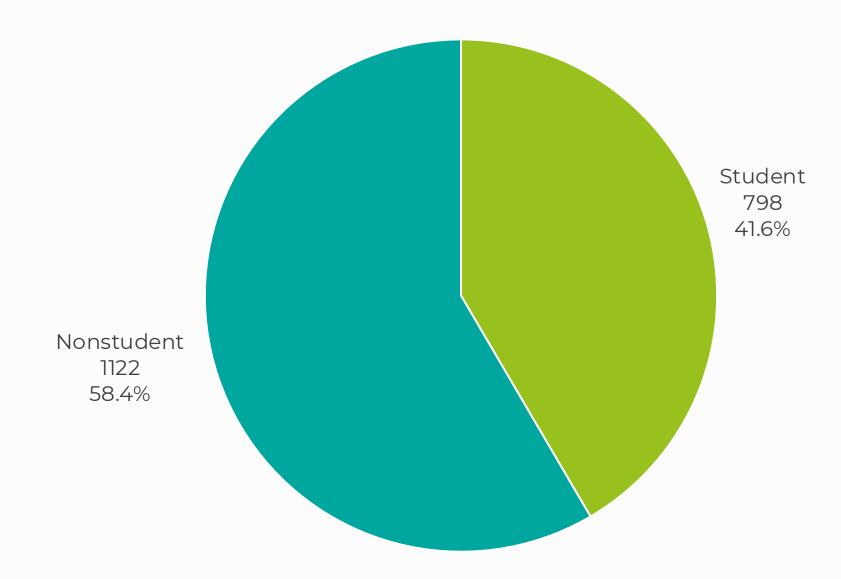
### **SIAG/CSE** Overall Membership



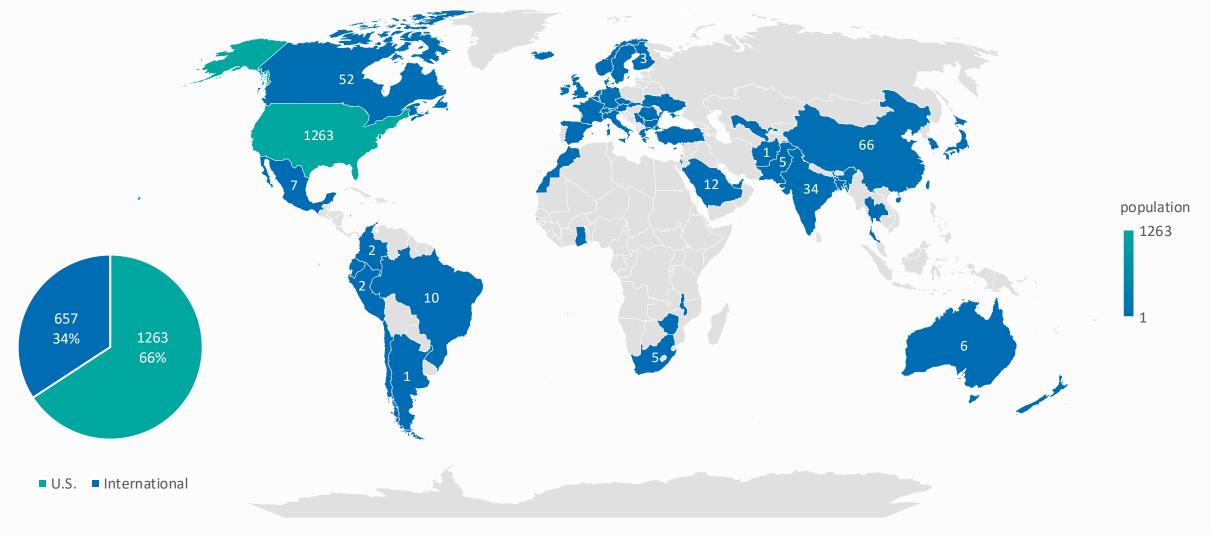
### **SIAG/CSE** Membership Demographics



## **SIAG/CSE** Membership Demographics

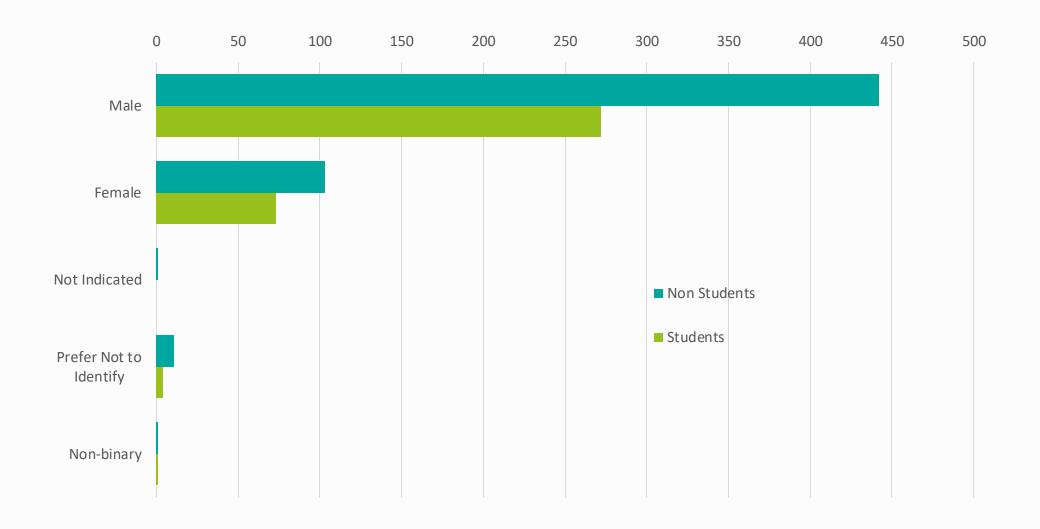


### **SIAG/CSE** Membership by Geography

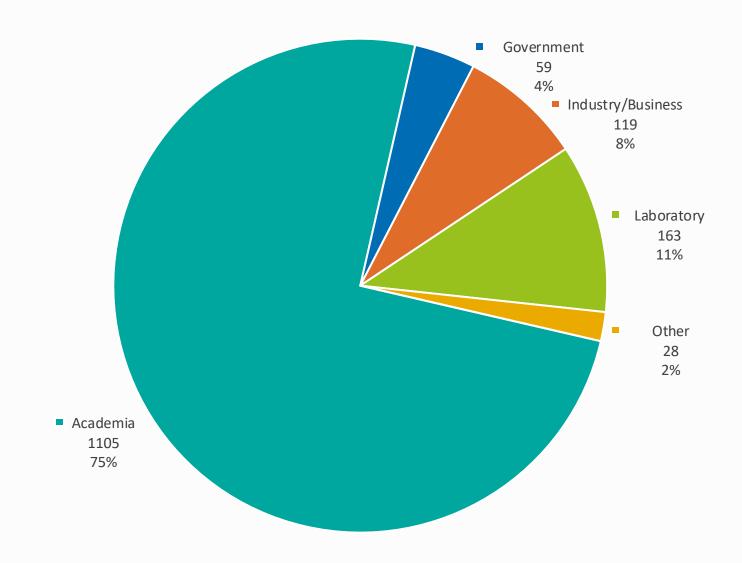


Powered by Bing © Australian Bureau of Statistics, GeoNames, Microsoft, Navinfo, Open Places, OpenStreetMap, TomTom, Zenrin

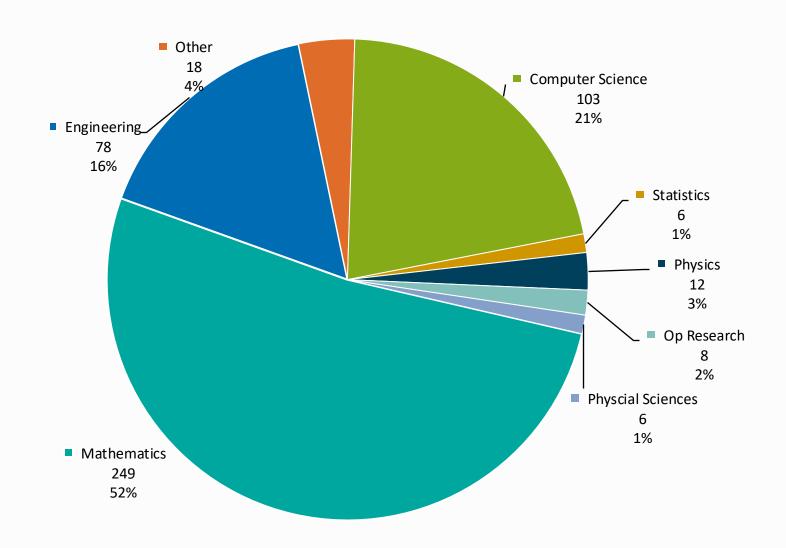
### **SIAG/CSE** Membership by Gender



## **SIAG/CSE** Membership by Employer Type



## **SIAG/CSE** Membership by Department Type



# Other Business

# Contacts

Chair Julianne Chung

jmchung@emory.edu

Vice Chair Edmond Chow

echow@cc.gatech.edu

Program Director Sarah Knepper

sarah.knepper@intel.com

Secretary Benjamin Peherstorfer

pehersto@cims.nyu.edu

2025 SIAG/CSE BUSINESS MEETING

