



William Lowell
PUTNAM
Mathematical Competition

ANNOUNCEMENT OF WINNERS

of the eighty-second competition held on December 4, 2021

In each of the following categories, the listing is in alphabetical order

THE PUTNAM FELLOWS — THE FIVE HIGHEST-RANKING INDIVIDUALS

Each receives an award of \$2,500

Andrew Gu	Massachusetts Institute of Technology
Michael Ren	Massachusetts Institute of Technology
Edward Wan	Massachusetts Institute of Technology
Shengtong Zhang	Massachusetts Institute of Technology
Daniel Zhu	Massachusetts Institute of Technology

THE NEXT TEN HIGHEST-RANKING INDIVIDUALS

Each receives an award of \$1,000

Ankit Bisain	Massachusetts Institute of Technology
Quanlin Chen	Stanford University
Tianze Jiang	Massachusetts Institute of Technology
Dain Kim	Massachusetts Institute of Technology
Sean J. Li	Massachusetts Institute of Technology
Brian S. Liu	Massachusetts Institute of Technology
Kevin J. Liu	Massachusetts Institute of Technology
Mihir A Singhal	Massachusetts Institute of Technology
Noah Walsh	Massachusetts Institute of Technology
Rui Yao	Massachusetts Institute of Technology

THE NEXT TWELVE HIGHEST-RANKING INDIVIDUALS

Each receives an award of \$250

Swapnil Garg	Massachusetts Institute of Technology
Thomas Guo	Massachusetts Institute of Technology
Minjae Kwon	Princeton University
Frank Lu	Princeton University
Zhao Yu Ma	Massachusetts Institute of Technology
Holden Mui	Massachusetts Institute of Technology
Kevin Ren	Massachusetts Institute of Technology
Victor Rong	Massachusetts Institute of Technology
Carl Schildkraut	Massachusetts Institute of Technology
Tristan Shin	Massachusetts Institute of Technology
Franklyn Wang	Harvard University
Guanpeng A. Xu	Massachusetts Institute of Technology

HONORABLE MENTION — INDIVIDUALS

Gradin Anderson, Brigham Young University	Unubold Munkhbat, Massachusetts Institute of Technology
Adam Ardeishar, Massachusetts Institute of Technology	Ritam Nag, Massachusetts Institute of Technology
Adam Bertelli, Carnegie Mellon University	Quan M. Nguyen, Massachusetts Institute of Technology
Ciprian Mircea Bonciocat, University of California, Los Angeles	Vladyslav Oleksenko, Carnegie Mellon University
Krit Boonsiriseth, Massachusetts Institute of Technology	Misheel Otgonbayar, Massachusetts Institute of Technology
Joseph Camacho, Brigham Young University	Alan Peng, Massachusetts Institute of Technology
Sanjana Das, Massachusetts Institute of Technology	Gregory Pylypovych, Massachusetts Institute of Technology
Sixiang Gao, Carnegie Mellon University	Timothy Qian, Massachusetts Institute of Technology
Weizhen Gao, Carnegie Mellon University	Niyanth Rao, Carnegie Mellon University
Kyle J. Gatesman, Johns Hopkins University	Brian E. Reinhart, Massachusetts Institute of Technology
Gopal K. Goel, Massachusetts Institute of Technology	Dilhan H. Salgado, Carnegie Mellon University
Howard L. Halim, Carnegie Mellon University	Gian Cordana Sanjaya, University of Waterloo
Joseph W. Heerens, Massachusetts Institute of Technology	Eric Shen, Harvard University
Daniel X. Hong, Massachusetts Institute of Technology	Zeyu Shen, Duke University
Edward Hou, Carnegie Mellon University	Tomasz Slusarczyk, Massachusetts Institute of Technology
Ivan Hu, University of Wisconsin	Nathan Smith, Washington University
Vincent Huang, Massachusetts Institute of Technology	Kenta Suzuki, Massachusetts Institute of Technology
Aaron Alvarado K. Julistiono, Massachusetts Institute of Technology	Sheldon K. Tan, Harvard University
Ashton Keith, Binghamton University	Colin S. Tang, Massachusetts Institute of Technology
Aidan M. Kelley, Washington University	Vittal Thirumalai, Massachusetts Institute of Technology
John S. Ko, Massachusetts Institute of Technology	Rahul K. Thomas, Stanford University
Nitin A. Kumar, Massachusetts Institute of Technology	Sasha Voitovych, University of Toronto
Thomas J. Lam, Carnegie Mellon University	Jianzhi Wang, University of California, Berkeley
Phuoc Dinh Le, Southern Methodist University	William Wang, Massachusetts Institute of Technology
Tran Duy Anh Le, University of Rochester	Xunjing Wei, Massachusetts Institute of Technology
Saba Lepsveridze, Massachusetts Institute of Technology	Richard H. Wu, University of California, Berkeley
Daniel Li, Massachusetts Institute of Technology	Alex Xu, University of Michigan
Kevin Li, Stanford University	Daniel Xu, Massachusetts Institute of Technology

Michael Li, University of Toronto
Samuel J. Li, University of Toronto
Zhening Li, Massachusetts Institute of Technology
Wentinn N. Liao, University of California, Berkeley
Andrew Y. Lin, Massachusetts Institute of Technology
James H. Lin, Massachusetts Institute of Technology
Jason Liu, Massachusetts Institute of Technology
Steven Liu, Massachusetts Institute of Technology
Yijia Liu, Duke University
Jeffrey Lu, Massachusetts Institute of Technology
Edis Memis, Harvard University

Binwei Yan, Massachusetts Institute of Technology
Andrew Yao, Massachusetts Institute of Technology
Zi Song Yeoh, Massachusetts Institute of Technology
Justin Y. Yu, Massachusetts Institute of Technology
Runze Yu, University of California, Los Angeles
Fedir Yudin, Massachusetts Institute of Technology
Ethan A. Zahid, Massachusetts Institute of Technology
Brad W. Zhang, Carnegie Mellon University
Daniel J. Zhang, University of California, Santa Barbara
Jacob B. Zhang, University of California, Los Angeles
Honglin Zhu, Massachusetts Institute of Technology

ELIZABETH LOWELL PUTNAM PRIZE

Each receives an award of \$1,000

Dain Kim

Massachusetts Institute of Technology

WINNING TEAMS

Rank	School	Team Members (in alphabetical order)
1	Massachusetts Institute of Technology	Edward Wan, Shengtong Zhang, and Daniel G. Zhu
2	Princeton University	Minjae Kwon, Frank Lu, and Aleksa Milojevic
3	Harvard University	Eric Shen, Sheldon K. Tan, and Franklyn Wang
4	Stanford University	Quanlin Chen, Kevin Li, and Rahul K. Thomas
4	University of California, Los Angeles	Ciprian Mircea Bonciocat, Runze Yu, and Jacob B. Zhang

The institution with the first-place team receives an award of \$25,000, and each member of the team receives \$1,000. The team and member awards for second place are \$20,000 and \$800, respectively; for third place, \$15,000 and \$600; for fourth place, \$10,000 and \$400; and for fifth place, \$5,000 and \$200.

HONORABLE MENTION — TEAMS

Listed by university in alphabetical order

School	Team Members (in alphabetical order)
Carnegie Mellon University	Adam Bertelli, Edward Hou, Dilhan H. Dalgado
Duke University	Yijia Liu, Nathan Nguyen, and Zeyu Shen
University of California, Berkeley	Wentinn N. Liao, Jianzhi Wang, and Richard H. Wu
University of Toronto	Michael Li, Samuel J Li, and Sasha Voitovych
University of Waterloo	Alexander Monteith-Pistor, Gian Cordana Sanjaya, and Rui Ming Xiong

THE WILLIAM LOWELL PUTNAM MATHEMATICAL COMPETITION WAS PREPARED BY:

Andrew Bernoff, Harvey Mudd College — Chair of The Problems Committee

Karl Mahlburg, Susquehanna International Group — Member of The Problems Committee

Richard Stong, Center For Computing Research — Member of The Problems Committee

Gabriel Carroll, University of Toronto — Contributor To The Problems Committee

Andrew Granville, University of Montreal — Contributor To The Problems Committee

Daniel Ullman, George Washington University — Director of The Competition

Mark Krusemeyer, Carleton College — Associate Director of The Competition

SCORE—RANK CORRESPONDENCE

A participant is said to have rank n if $n-1$ participants scored higher

Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank
119	1	68	28	51	55	35	127	21	329	7	1022
110	2	67	29	50	57	34	130	20	352	6	1067
99	3	66	30	49	65	33	136	19	404	5	1142
90	4	65	32	48	70	32	150	18	423	4	1314
89	5	64	33	46	72	31	167	17	449	3	2200
83	6	61	34	45	74	30	193	16	464	2	2270
82	7	60	35	44	77	29	212	15	489	1	2327
80	8	59	37	43	80	28	225	14	536	0	2431
79	9	58	40	42	84	27	238	13	635		
77	11	57	41	41	89	26	244	12	671		
75	16	56	42	40	96	25	252	11	739		
73	18	55	45	39	106	24	265	10	829		
72	20	53	46	38	112	23	282	9	956		
71	21	52	50	36	123	22	303	8	979		

**FREQUENCY DISTRIBUTION OF PROBLEM SCORES
OF THE TOP 535 CONTESTANTS**

Score	A1	A2	A3	A4	A5	A6	B1	B2	B3	B4	B5	B6
10	369	239	66	7	130	4	204	114	28	27	5	8
9	14	14	2	0	20	1	18	12	10	40	4	1
8	36	36	4	2	5	1	47	1	0	12	1	2
7	4	14	2	2	3	0	16	0	0	0	2	0
6	8	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
4	93	0	0	0	0	0	0	0	0	0	0	0
3	0	31	39	0	6	0	0	1	0	0	1	0
2	2	41	49	0	35	0	23	11	2	34	0	0
1	1	44	52	1	34	1	32	102	3	35	4	16
0	6	59	78	115	114	150	115	124	80	62	94	52
NA	2	57	243	408	188	378	80	170	412	325	424	456

STUDENTS RANKED 106—193

Listed by university in alphabetical order

Arizona State University, Tempe, AZ

Tanner J. Reese

Bob Jones University, Greenville, SC

Erick J. Ross

Brandeis University, Waltham, MA

Benjamin M. Kamen

Brown University, Providence, RI

Luke Choi

Carter Cobb

Dominick Joo

California Institute of Technology, Pasadena, CA

August Chen

Carnegie Mellon University, Pittsburgh, PA

Alan M. Abraham

Isaac R. Browne

Samuel R. Delatore

Justin Hsieh

Callan Jacobus

Eric J. Kim

Christopher Lambert

Advait V. Nene

Yan Pan

Qingyi Peng

Sam Rosenstrauch

Justin W. Sun

Haveesh S. Viswanatha

Richard Wu

Grant Yu

Cornell University, Ithaca, NY

Sikai Shen

Duke University, Durham, NC

Nathan Nguyen

Harry Chen

Fairfield University, Fairfield, CT

Thanh Le

Florida State University, Tallahassee, FL

Graham L. O'Donnell

Harvard University, Cambridge, MA

Kevin Du

William Y. Hu

Fabio Pruneri

Daniel Sheremeta

Gabriel D. Wu

Harvey Mudd College, Claremont, CA

Ian Shors

Haverford College, Haverford, PA

Guilherme Zeus Dantas e Moura

Lucas L. Nelson

Indiana University— Purdue University Indianapolis, Indianapolis, IN

Croix Gyurek

Massachusetts Institute of Technology, Cambridge, MA

Bhavya Agrawalla	Sean Elliott	Rupert M. Li	Nguyen Tran Bach
Brandon Chen	Jonathan Huang	William Lin	Holden E. Watson
Matthew Cho	Maxwell Jiang	Youssef Marrakchi	Benjamin P. Wright
Akash Das	Hyunwoo Lee	Asaad Mohammedsaleh	Jeffery Yu
Nishant Dhankhar	Jeffery Li	Aleksandre Saatashvil	

McGill University, Montreal, QC, Canada

Antoine Labelle

Montgomery College, Rockville, MD

Trang TT. Vu

Northeastern University, Boston, MA

Noble Mushtak

Northwestern University, Evanston, IL

Akhil S. Kalghatgi

Princeton University, Princeton, NJ

George H. Bentley	Marko Medvedev
Adam X. Huang	Aleksa Milojevic
Sunay Joshi	Ben Zenker

Rice University, Houston, TX

Mark Helman

Rose-Hulman Institute of Technology, Terre Haute, IN

Reed C. Phillips

Stanford University, Stanford, CA

Andrei Mandelshtam
Zichuan Xu
Katherine Y. Yu

University of British Columbia, Vancouver, BC, Canada

Ray Ng
Arvin Sahami

University of California, Berkeley, CA

Shreyas Ramamurthy
Henry Zeng

University of California, Irvine, CA

Grady J. Crossley

University of California, Los Angeles, CA

Issac Li

University of California, San Diego, CA

Jingyue Zhang

University of California, Santa Cruz, CA

Sam A. Reifenstein

University of Chicago, Chicago, IL

Aiden Bailey
Arjun B. Venkatraman
Derek Zhu

University of Illinois, Urbana-Champaign, IL

Brendan A. Biernacki
Pavle Vuksanovic

University of Maryland, College Park, MD

Steppan Konoplev
Thomas Luo

University of Michigan, Ann Arbor, MI

Ramchandra Apte
Adam J. Earnst

University of Minnesota, Twin Cities, Minneapolis, MN

Nathan Mihm

University of New Mexico, Albuquerque, NM

Franklin Pezzuti Dyer

University of Pennsylvania, Philadelphia, PA

Gokul K. Murugadoss

University of Texas, Austin, TX

Luis Kim

University of Toronto, Toronto, ON, Canada

Alptekin C. Goksan

Chayim Lowen

Alexander Ryabchenko

University of Virginia, Charlottesville, VA

Declan R. Stacy

University of Washington, Seattle, WA

Coby Tran

University of Waterloo, Waterloo, ON, Canada

Yundi Duan

Rui Ming Xiong

Alexander Monteith-Pistor

Michael Yang

Washington University, St. Louis, MO

Shifan Dong

William and Mary, Williamsburg, VA

Jason Cheah

Yale University, New Haven, CT

Derek Dong

Jason Wang

Steven S. Ma

Ran Wang

Students Ranked 212—489

Listed by university in alphabetical order

Amherst College, Amherst, MA

Alan Li
Derek Zhang

Arizona State University, Tempe, AZ

Matthew Hurley
Aareyan Manzoor

Boston University, Boston, MA

Henry A. Todorow

Brigham Young University, Provo, UT

Gordon Bridge
James Camacho
Dallin Christiansen
Quinlan T. Leishman
Daniel South

Brown University, Providence, RI

Ethan D. Bove
Kyle K. Lee
Akash B. Singirikonda
Andrew Yuan
Xiaochi Zhang

Bryn Mawr College, Bryn Mawr, PA

Jiachen Kang

Bucknell University, Lewisburg, PA

Anh Tran

California Institute of Technology, Pasadena, CA

Akshay Gowrishankar
Depei Li
Joseph R. Litvin
Yakov Shalunov

California Polytechnic State University, Pomona, CA

Peter C. DeVries

California Polytechnic State University, San Luis Obispo, CA

Mav Lara

California State University Channel Islands, Ventura County, CA

Kai L. Murray

Carleton College, Northfield, MN

Wasin Meesena

Carnegie Mellon University, Pittsburgh, PA

Siyuan Chen	Daniel D. Kim	Parth D. Shastri
Puhua Cheng	Suhas Kotha	David Tang
Min Yeong Choi	Vinod Krishnamoorthy	Mario C. Tutuncu-Macias
Gabriel Ciccu Falcon Lins	Zack T. Lee	John Wang
Xinyu Cui	Lucas Liu	Jacob C. Weiner
Yucheng Dai	Ethan Lu	Braden R. Yates
Russell Emerine	Rose H. Luttmer	Kevin You
Evan Fang	Eric H. Oh	Gregory Zelevinsky
Rajeev Godse	Aidan B. Pevida	Yixuan Zheng
Ethan Gu	Aresh Pourkavoos	Allen Zheng
Eric Huang	Khunpob Sereesuchart	Eric Zheng
Joseph S. Kalarickal	Saadiq Shaikh	Kevin A. Zhou

Case Western Reserve University, Cleveland, OH

Ryan Karpuszk

Clemson University, Clemson, SC

Lucy Staubes

Columbia University, New York City, NY

Ashwin Padaki
Kevin Y. Zhang

Cornell University, Ithaca, NY

Tomas Alvarez
Rowan D. Hess
Zichen Wang

**Courant Institute of Mathematical Sciences—New York University,
New York, NY**

Ethan Joo
Yuelong Li
Nicholas Wang

Dartmouth College, Hanover, NH

Finn Hulse

Davidson College, Davidson, NC

William Jo Smith
Kenan B. Wood

Drexel University, Philadelphia, PA

Duy D. Nguyen

Duke University, Durham, NC

Feng Cong

Allan Guo

Marcos Hirai Catao

Yi Li

Steven Li

Jerry Liu

Kevin H. Tu

Ximeng Wang

Andy Y. Wu

Yinhong Zhao

Florida Atlantic University, Boca Raton, FL

Christian X. Engman

Georgetown University, Washington, DC

Joe W. Kleban

Georgia Institute of Technology, Atlanta, GA

Jeffrey S. Chang

Alexander Divoux

Vasisht L. Ganesh

Dorian E. Kidonakis

Neil R. Patram

Suchet J. Sapre

Daniel D. Shen

Lixin Zheng

Georgia Southern University - Armstrong Campus, Savannah, GA

Jesus Omar Sistos Barron

Grinnell College, Grinnell, IA

Lilith O. Hafner

Harvard University, Cambridge, MA

Gaurav M. Goel

Michael Hwang

Alexander L. Zhang

Harvey Mudd College, Claremont, CA

Tiger Che

Mathus Leungpathomaram

Prakod Ngamlamai

Cedar F. Turek

Haverford College, Haverford, PA

Joao Pedro Mello de Carvalho

Logan A. Post

Iowa State University, Ames, IA

Andrew Osborne

Johns Hopkins University, Baltimore, MD

Yuheng Shi
Sean J. O'Connor
Everett Xu

Kent State University, Kent, OH

Nathaniel D. Miller

Loyola Marymount University, Los Angeles, CA

Jeffrey Huang

Massachusetts Institute of Technology, Cambridge, MA

Khalid Ajran	David Hu	Anders Olsen
Adithya S. Balachandran	Andrew Huang	Steven Reyes
Nikoloz Birkadze	Shawn Im	Juan E. Reyes
David J. Chen	Gabriel Kammer	Natanon Therdpraisan
Abdellatif Anas Chentouf	Daniel Li	Christopher Tong
Matija Delic	Anqi Li	David Vulakh
Owen M. Dugan	Yuka Machino	Catherine Wu
Chirag Falor	Srinath V. Mahankali	Jesse Yang
Vincent K. Fan	Andrei T. Marginean	Jeremy Zhou
Letong Hong	Isabel E. McGuigan	

McGill University, Montreal, QC, Canada

Yuhe Jiang
Alexander S. Koran
Qiu Shi Wang

Michigan Technological University, Houghton, MI

Alan K. Bouwman

Northeastern University, Boston, MA

Devin Brown

Princeton University, Princeton, NJ

Daniel Carter	Stephen Jiang
Atanas B. Dinev	Austen Mazenko
Zander Hill	Igor Medvedev

Purdue University, Lafayette, IN

Zijin Liu

Queens University, Kingston, ON, Canada

Bijan Betel Miri
Raymond Jing

Reed College, Portland, OR

Tyler Dunaisky
Daniel J. Zou

Rensselaer Polytechnic Institute, Troy, NY

Alex B. Moore

Rice University, Houston, TX

Ruofeng Liu
Arie Ogranovich
Alan Tapper

Rochester Institute of Technology, Rochester, NY

Evan RV. Rysdam

Rutgers, State University of New Jersey, New Brunswick, NJ

Ozan Acikgoz
Enver S. Aman

Stanford University, Stanford, CA

Michael Cho	David Kewei Lin	Matias Shundi
Yunchu Dai	Bradley K. Moon	Aoden M. Teo
Tae Kyu Kim	Ian R. Ruohoniemi	Anthony Zhan
Sidhart Krishnan	Danny Sallis	

Stevens Institute of Technology, Hoboken, NJ

Eshan Tivakaran

Stony Brook University, Stony Brook, NY

Calvin Aw

Syracuse University, Syracuse, NY

Connor B. Ritchie

Texas A&M University, College Station, TX

Ethan Luo
Jason Luo

Université de Sherbrooke, Sherbrooke, QC, Canada

Ismael El Yassini

University of Arkansas, Fayetteville, AR

Michael A. Logal

University of Alabama, Tuscaloosa, AL

Jacob B. Glidewell

Justin Z. Saye

University of Alberta, Edmonton, AB, Canada

Edmond Tuong

Coleton Kotch

Sergii Penner

University of British Columbia, Vancouver, BC, Canada

Eugene K. Chau

Oakley M. Edens

Siyang Lin

University of Calgary, Calgary, AB, Canada

John Zheng

University of California, Berkeley, CA

Dhruba Ghosh

Ajit Kadaveru

Adam A. Khoja

Austin Lei

Axel J. Li

Andrew D. Lin

Ishaan Patkar

Zachary G. Slonim

University of California, Irvine, CA

David B. Militante

University of California, Los Angeles, CA

Duc M Hoang

John J. Li

Alvin Liu

Curtis Liu

Sumith R. Nalabolu

Sachin Sahay

Zachary Tu

Eric Wu

Chujun Xu

Hongyu Zhu

University of California, San Diego, CA

Mark L. Barbone

Shubham Bhargava

Derek Cantor

Jared A. Hughes

University of California, Santa Barbara, CA

Theodore S. Bafrali

Abhinav Ganesh

Dongming Hua

Drew N. Miller

Christian D. Reynaldo

University of Chicago, Chicago, IL

William Hu
Sparsho De

Cameron A. Chang
Andre F. Emery

University of Dallas, Irving, TX

Isaac Hellerman

University of Delaware, Newark, DE

Leon Zhao

University of Florida, Gainesville, FL

Hugh W. Dennin
Carson A. Jones
Alejandro Leon

Jake B. Shannin
Zonshen Yu

University of Illinois, Urbana-Champaign, IL

Rohan Bokaria
David T. James
Aditya Jain

Erin Kim
Ruzhang Yang

University of Iowa, Iowa City, IA

Nick Morrow
Carter J. Tams

University of Kentucky, Lexington, KY

Noah Owen

University of Manitoba, Winnipeg, MB, Canada

Marshall Kaatz

University of Maryland, College Park, MD

John C. Brownfield
David D. Fang
Isaac A. Mammel

Garrett D. Peters
Jackson T. Reynolds

University of Massachusetts, Amherst, MA

Nathaniel C. Reid

University of Michigan, Ann Arbor, MI

Marcus C. Gozon
Jia Guo

Tuong Vu Le
An H. Nguyen

University of Minnesota, Twin Cities, Minneapolis, MN

Nhung Pham
Andrew T. Hale

University of Nevada, Las Vegas, NV

Gaelan Chen

University of Nevada, Reno, NV

Logan K. Leavitt

University of North Carolina, Chapel Hill, NC

Stepan Malkov

University of North Texas, Denton, TX

Michalis W. Paizanis

University of Notre Dame, Notre Dame, IN

William K. Grannis

University of Pennsylvania, Philadelphia, PA

Tyler Edwards

Benjamin Lee

David Kogan

Zhong Zhang

University of Rochester, Rochester, NY

Phuc H. Lam

Zhiyu Lei

University of Southern California, Los Angeles, CA

Benjamin L. Cohen

Joshua Speckman

University of Texas, Austin, TX

Alexander M. Burton

Mihir Shah

Lazar Ilic

Brian Wang

Aaron J. Lamoreaux

Hubert Yang

University of Texas, Dallas, TX

Evan M. Bailey

University of Toronto, Toronto, ON, Canada

Zelin Chen

Yao Kuang

Jonah Chen

Yunong Li

Freeman Cheng

Jiyuan Lu

Nicholas Sullivan

Jing Wang

Boyu Zheng

University of Utah, Salt Lake City, UT

Emil Geisler

University of Virginia, Charlottesville, VA

Varun Vejalla

University of Washington, Seattle, WA

Gregory Baimetov

Benjamin Li

Nelson Y. Sun

University of Waterloo, Waterloo, ON, Canada

Marcus Chan

Thinula De Silva

Andrew Dong

Michael Du

Shuo Gao

Richard Y. Kang

Tam An Le Quang

Nathan Lo

Jonathan C. Nitisastro

Om Patel

Davi C. Sena

Kevin Wan

Moses Xu

Danny X. Zhang

University of Wisconsin, Madison, WI

Joseph Cai

Nitit Jongsawatsatporn

Vanderbilt University, Nashville, TN

Gabriel Diraviam

Kevin Gomez

Villanova University, Villanova, PA

Abdullah Al Rafi Mahmud

Virginia Wesleyan University, Virginia Beach, VA

June Richardson

Wagner College, Staten Island, NY

Mohamed E. Lotfi

Washington University, St. Louis, MO

Nicholai Dimov

Wheaton College, Wheaton, IL

Daniel R. McKay

Williams College, Williamstown, MA

Rauan Kaldybayev

Jonathan S. Rogers

Alexander E. Shashkov

Benjamin M. Baily

Yale University, New Haven, CT

John Gunderson

Eddie Hu

Frank Li

Deyuan Li

Andy N. Nilipour

Tushar S. Patel

Vismay Sharan

Preston A. Smith

Raymond Yang

Stephen Y. Yin

Michael Ying

Fred Zhang