CISE CAREER Proposal Writing Workshop

Joydip Kundu
Deputy Assistant Director
Computer and Information Science and Engineering
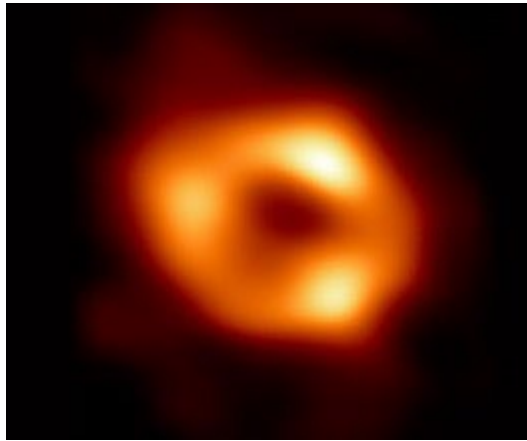**National Science Foundation**

April 29, 2024

Thank you!

- **Organizers:** Wenjing Lou and the team from Virginia Tech

- **Host:** George Washington University

- **CISE program officers:** Nicholas Goldsmith, Mitra Basu, Almadena Chtchelkanova, Darleen Fisher, Jenny Li, Phil Regalia, Jie Yang

National Science Foundation's Mission

"To promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense…"
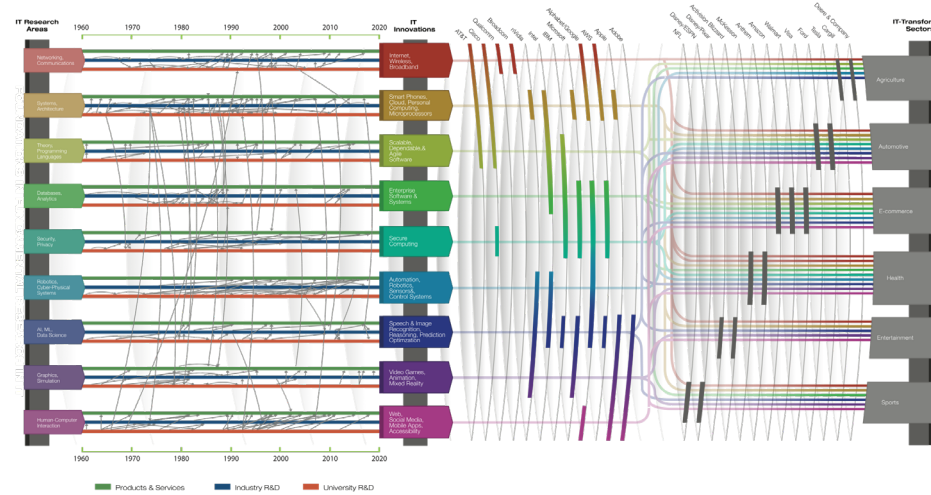
Foundational, Translational, Societal Impacts

Foundational

How information is gathered and analyzed

44 of the 72 Turing Awardees have received NSF funding

Translational

How the world computes and communicates

>$1 Trillion of economic impact

Societal

Benefitting American communities

Changing the face of computing

https://www.nationalacademies.org/our-work/depicting-innovation-in-information-technology

NSF's STRATEGIC THEMES

Advancing Emerging Industries for Economic and National Security

Creating Opportunities Everywhere

Building a Resilient Planet

Strengthening Research Infrastructure

Programmatic directorates and offices supporting the NSF Mission

Engineering

Biological Sciences

Computer & Information Science & Engineering

Geosciences (including Polar Programs)

Education & Human Resources

Mathematical & Physical Sciences

Social, Behavioral & Economic Sciences

Integrative Activities

Technology, Innovation and Partnerships

International Science & Engineering

Now: CISE Organization and Core Programs

Katie Antypas, Office Director

Amy Walton, Deputy Office Director

Ellen Zegura, Division Director
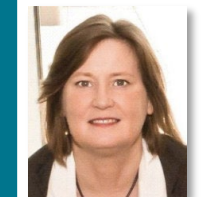
Behrooz Shirazi, Deputy Division Director

Office of Advanced Cyberinfrastructure (OAC)

- OAC core
  Data/Software
  Leadership and Advanced Computing
  Networking/Cybersecurity
  Learnig and Workforce

Computing & Communication Foundations (CCF)

- Algorithmic Foundations
- Communications and Information Foundations
- Software and Hardware Foundations
- Foundations of Emerging Technologies

Irina Dolinskaya, Acting Division Director

Siddiq Qidwai, Acting Deputy Division Director

CISE Leadership

Dilma Da Silva, Acting Assistant Director

Joydip Kundu, Deputy Assistant Director

Michael Littman, Division Director

Wendy Nilsen, Deputy Division Director

- Computer Systems Research
- Networking Technology and Systems
- Education and Workforce Development

Computer & Network Systems (CNS)

- Human-Centered Computing
- Information Integration and Informatics
- Robust Intelligence

Information & Intelligent Systems (IIS)

CISE by the Numbers

NSF funds **80%** of federally-funded CS in the US at academic institutions.

$1,035.9 M
Enacted budget for fiscal year 2023
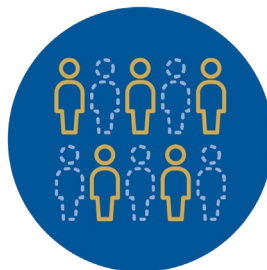
6,401
Proposals evaluated

29%
Funding rate

1,847
Awards made

371
Institutions supported

6,647
Grad students

21,623
Individuals from senior researchers to undergrads

48 + D.C. + 1 territory

89
Minority-serving Institutions

All data depicted is for fiscal year 2023.

What is CAREER?

A chance to get started on your research/education career?

A reward for an already great start on your career?

A checkmark for your tenure case?

What is CAREER?

Intent

- Provide stable support at a sufficient level and duration

- Enabling careers as
    - Outstanding researchers
    - Outstanding educators

Program website

- https://new.nsf.gov/funding/opportunities/faculty-early-career-development-program-career

Deadline

- July 24, 2024

What is CAREER?

CAREER is not meant to recognize outstanding scholarship, but to enable it.

No need to wait.

- We encourage to submit your first CAREER proposal within the first couple years of your position.

CAREER is different from CISE Research Initiation Initiative (CRII)

- CRII is smaller award

- For those lacking access to organizational resources

- Aims to broaden institutions doing computing research

CISE programs accepting CAREERs

Cross-cutting programs:

Cyber-Physical Systems

Foundational Research in Robotics

Secure and Trustworthy Cyberspace

Office of Advanced Cyberinfrastructure (OAC)

- OAC core

Computing & Communication Foundations (CCF)

- Algorithmic Foundations
- Communications and Information Foundations
- Software and Hardware Foundations
- Foundations of Emerging Technologies

CISE Directorate

- Computer Systems Research
- Networking Technology and Systems
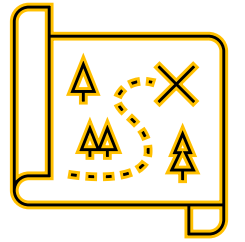- Education and Workforce Development

Computer & Network Systems (CNS)

- Human-Centered Computing
- Information Integration and Informatics
- Robust Intelligence

Information & Intelligent Systems (IIS)

Finding funding opportunities

Look for funded projects
- NSF awards are here: https://www.nsf.gov/awardsearch

Talk to program officers
- NSF staff are here: https://www.nsf.gov/staff

Browse funding opportunities
- NSF funding opportunities are here: https://new.nsf.gov/funding/opportunities

We accomplish our mission by supporting you.

Send us your proposals.

Tell us about your triumphs.

Become a reviewer.

Talk to our program officers.

https://www.nsf.gov/staff

https://new.nsf.gov/cise