



I-SENSE 2017 Funding Opportunities

Scalable Parallelism in the Extreme (NSF 16-605)

Deadline: January 10

Duration: Two-four years

Budget: \$1,000,000

The Scalable Parallelism in the Extreme program aims to support research addressing the challenges of increasing performance in the modern era of parallel computing. This will require a collaborative effort among researchers in multiple areas. This program encompasses supporting foundational research toward architecture and software approaches that drive performance improvements in the post-Moore's Law era; development and deployment of programmable, scalable, and reusable platforms in the national and scientific cyberinfrastructure ecosystem; increased coherence of data analytic computing and modeling and simulation; and capable extreme-scale computing. Coordination with industrial efforts that pursue related goals are encouraged. To read the solicitation, click [here](#).

Structural and Architectural Engineering and Materials (SAEM) (PD 17-1637)

Deadline: January 13

The overall goal of the Structural and Architectural Engineering and Materials (SAEM) program is to enable sustainable buildings and other structures that can be continuously occupied and/or operated during the structure's useful life. The SAEM program supports fundamental research for advancing knowledge and innovation in structural and architectural engineering and materials that promotes a holistic approach to analysis and design, construction, operation, maintenance, retrofit, and repair of structures. For buildings, all components including the foundation-structure-envelope (the façade, curtain-wall, windows, and roofing) and interior systems (flooring, ceilings, partitions walls), are of interest to the program. The SAEM program encourages the integration of research with knowledge dissemination and activities that can lead to broader societal benefit for provision of sustainable structures. To read the solicitation, click [here](#).

NIST Public Safety Innovation Accelerator Program (2017-NIST-PSIAP-01)

Deadline: February 28

Duration: Two-year projects

The NIST Public Safety Innovation Accelerator Program is seeking applications to accelerate research, development, production, and testing activities in six specific technology areas: mission critical voice; location based services; public safety analytics; communication demand modeling; research and prototyping platforms; and resilient systems. This program is one of several initiatives within the NIST Public Safety Communications Research program. For details on this program, click [here](#).
To read the solicitation, click [here](#).

(cont'd.)



Innovations at the Nexus of Food, Energy and Water Systems (NSF 17-530)

Deadline: March 6

Budget: \$2,500,000

Factors contributing to stresses in the food, energy and water systems include increasing regional and social pressures and governance issues as the result of land use change, climate variability and heterogeneous resource distribution. Interconnections and interdependencies associated with the food, energy and water nexus create research grand challenges for understanding how the complex, coupled processes of society and the environment function. Investigations of these complex systems may produce discoveries that cannot emerge from research on food or energy or water systems alone. The synergy among these components in the context of sustainability that will open innovative science and engineering pathways to produce new knowledge, novel technologies and predictive capabilities to solve the challenges of scarcity and variability. To read the solicitation, click [here](#).
