



INFORMATION ASSURANCE
DIRECTORATE



Research Opportunities at the NSA

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IAD Trusted Engineering Solutions

MARCH 2015

AGENDA

- Innovations Broad Agency Announcement (BAA) Special Opportunities Request (SOR)
- Innovative Mission Capabilities BAA
- Grants for Research in Mathematics
- Unsolicited Proposals
- Conferences, Workshops, Research Experience for Undergraduates (REUs)
- Pathway to Success



INNOVATIONS BROAD AGENCY ANNOUNCEMENT (BAA) SPECIAL OPPORTUNITIES REQUEST (SOR)



- SOR's are open to all companies and research organizations
- Topics announced on Acquisition Resource Center (ARC)
- Late stage R&D developed to the point of being prototyped
 - Up to 12 months, \$1M fixed price contract
- Schedule:
 - Early Jan: Release of BAA SOR via NSA's ARC.
 - Late Jan: Papers Due
 - June-Sept: Contract award
 - Other SORs released throughout the year
- https://www.nsa.gov/business/programs/programs_for_innovation.shtml



INNOVATIVE MISSION CAPABILITIES BAA

BUSINESS

- Small business only – Academic teaming allowed
- Opportunity to rapidly prototype potential new capabilities
 - 3 month, \$50K fixed price contract
 - Demo to USG personnel (NSA, IC, DoD)
 - Follow-on contracts to develop/deploy - with teaming possibilities
- Engage with NSA – no security clearances required
- Work is unclassified and done at company facilities
- Schedule:
 - Nov: Market Survey via NSA's Acquisition Resource Center (ARC).
 - Feb: Survey response and RFP release
 - Mar: Proposals due
 - June: Contract award
- https://www.nsa.gov/business/programs/programs_for_innovation.shtml



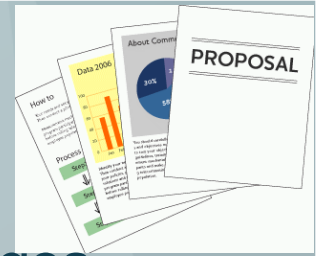
GRANTS FOR RESEARCH MATHEMATICS



- The Mathematical Sciences Program (MSP) unclassified research in Algebra, Number Theory, Discrete Mathematics, Probability, and Statistics. Does not support research in cryptology.
- Two types of Grants:
 - Young Investigators Grant
 - This award is available to investigators within ten years of receiving Ph.D. The basic award is \$20,000 per year for two years.
 - Standard Grant.
 - Standard Grant is for two years with proposals accepted every other year, beginning 2015. The basic award is limited to \$40,000 per year
- Proposals Submitted annually September 1 – Oct 15
- Selection Notification: Summer of following year
- Grant award: Feb – May following notification
 - https://www.nsa.gov/research/math_research/index.shtml



UNSOLICITED PROPOSALS



- **POLICY:** The National Security Agency (NSA) encourages submission of unsolicited proposals in accordance with the policies and procedures of the Federal Acquisition Regulation (FAR) (Subpart 15.6).
- **FAR:** An "unsolicited proposal" is a written proposal for a new or innovative idea that is submitted to an agency on the initiative of the offeror for the purpose of obtaining a contract with the Government and that is not in response to a request for proposals, Broad Agency Announcement, Small Business Innovation Research topic, Small Business Technology Transfer Research topic, Program Research and Development Announcement, or any other Government-initiated solicitation or program.
- https://www.nsa.gov/business/_files/unsolicited_proposals_guide.pdf



CONFERENCES, WORKSHOPS, RESEARCH EXPERIENCE FOR UNDERGRADUATES

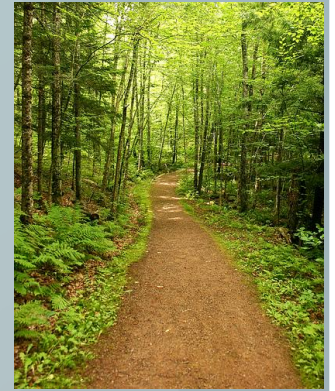


- The MSP supports conferences and workshops in Algebra, Number Theory, Discrete Mathematics, Probability, and Statistics
- Supports efforts to increase participation in the mathematical sciences, promote wide dissemination of mathematics, and the education and training of undergraduates and graduate students.
- Up to 2 years of support
- Proposals submitted annually September 1 – Oct 15
- Average award \$10K - \$15K, cannot exceed \$25K/yr.
- Can be combined with support from other agencies
- https://www.nsa.gov/research/math_research/index.shtml
- <http://sam.msp.berkeley.edu/nsa-ams/about/program/guidelines.html>



PATHWAY

- "Pathway to Success" is the Start-up Guide for doing business with the Agency. Presented by the Office of Small Business Programs
- A standing, quasi bi-weekly meeting/briefing available after registering in the ARC
- Open to companies of all sizes, provides a comprehensive overview of NSA programs designed to help companies do business with the Agency
- https://www.nsa.gov/business/getting_started/index.shtml



IAD'S TOP TECH CHALLENGES

1. RESILIENCY – Resilient architectures and operations
2. AUTOMATED RISK DETECTION – Monitoring heuristic/behavioral – large scale/real-time/multi-domain
3. AUTOMATED RISK MITIGATION – Respond to risks at network speed, proactive and predictive mitigation
4. SECURE MOBILITY – Usable and assured; spanning endpoints, links, infrastructure
5. SECURE OPERATIONS – For cloud-hosted user environments (e.g., blue, forensic, incident, ...)
6. THREAT MECHANISMS – Detection and response mechanisms for insider threats (timely, fine-grained)



QUESTIONS?



CONTACT INFORMATION

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NSA MISSION

Protect



Protect U.S. Secrets

Assure communications
and systems against
exploitation

**Information
Advantage**

Discover



Discover Adversaries' Secrets
Intercept and exploit Foreign
Communications (SIGINT)

Outmaneuver Adversaries in Cyberspace

