



Request for Proposal: Simulation Engine Development and Engineering

Submission Deadline: June 30, 2020

Period of Performance: 3 Years

Earliest Start Date: July 1, 2020

The Center for Mind and Culture (CMAC) is a non-profit research center that innovates creative solutions for urgent and complex social problems. Committed to a radically interdisciplinary, non-partisan, high-tech approach, CMAC mobilizes an international network of experts to develop and disseminate visionary insights to public and professional stakeholders.

Funding Opportunity Description

The recent SARS-CoV-2 pandemic has underscored how critical effectively representing and understanding complex systems is for sustaining healthy societies. Modeling and Simulation (M&S) is one of the preferred methods to study complexity, including complex adaptive social systems. Two challenges associated with the study of complexity using M&S are:

- representing large-scale complex phenomena such that all necessary entities, relationships, and interactions are captured [the scaling problem]; and
- visualizing and interacting with computational simulations to deepen understanding of their dynamics and meaning [the interpretation problem].

The Center for Mind and Culture is seeking new approaches, frameworks, and technical solutions to address the scaling and interpretation problems, in relation to complex human systems at a global scale. The solution should be generalizable to all types of complex systems, including systems with cognitively plausible and behaviorally realistic AI agents. The solution should not be limited by a specific modeling paradigm. The solution should be scalable in resolution and scope, and should support direct or indirect transfer of existing models.

Contract Information

Funding Instrument: CMAC-Originated contract, maximum 15% indirect costs

Award Budget: \$230,000.00, inclusive of indirect costs

Award Project Period: 3 Years

Application and Submission Information

All applications must be submitted electronically to admin@mindandculture.org. Required application materials include:

Cover Letter

Include a descriptive title of proposed activity, names of all key personnel, and participating institutions.



Proposal Narrative

Describe the proposed solution. Be sure to describe the impact of the proposed solution, its significance to the field, and the relevant expertise of key personnel. Provide a timeline for proposed activities, identifying responsible staff. Outline deliverables for the proposed solution.

Budget

All costs must be reasonable, necessary to accomplish proposed objectives, allowable in terms of Code of Federal Regulations 200 Subpart E Cost Principles, auditable, and incurred during the period of performance. All costs are subject to audit and record retention. The payment schedule will be negotiated after award decision.

Center for Mind and Culture Contacts

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