



Principal Modeling & Simulation Engineer/Scientist

Washington, DC

Aptima, Inc. is a fast-paced, employee-focused small business that specializes in finding solutions to complex problems in human-centered engineering. We currently have openings for an experienced, passionate, creative scientist/engineer with a background in mathematical modeling and simulation. The hiring team employs computational methods to maximize organizational effectiveness, identify patterns in noisy data, and understand/design organizational, cultural, and social behavior. The ideal candidate will possess a background in problem analysis, mathematical formulation, algorithm development, and/or model implementation and analysis. They will also have experience in technical management and customer interaction.

Requirements:

- Masters degree or Ph.D. in an engineering or applied mathematical modeling discipline (e.g., Computer Science, Electrical and Systems Engineering, Applied Mathematics, Operations Research)
- Technical R&D experience in one or more of these areas:
 - Developing and implementing optimization and probabilistic classification, inference, or control models for organizational analysis or behavior recognition from diverse sensor sources
 - Developing and applying social network or other graph theoretic analyses as quantitative models of social phenomena
 - Developing and employing intelligent agents, socio-cultural models, or mixed-initiative AI planning for smart decision support systems
 - Developing and utilizing machine learning techniques to complex real-world data
- History of customer facing business development activities
- Track record of program management and/or product development for government contracts
- Background in writing and winning technical proposals
- Experience collaborating with software engineers, mathematicians, and intelligence analysts
- Authorship in journal and/or other refereed publications
- Experience writing technical reports and proposals
- U.S. citizenship
- Active security clearance preferred; must be able to obtain Secret security clearance

Possible responsibilities include technical management of multi-disciplinary projects, oversight of integrated product development, and coordination of large proposals. The position entails substantial collaboration with software engineering and social science staff members.

Aptima will compensate applicants for any travel or relocation expenses to fill this position. All applicants must be willing to work on site at Aptima's Washington, DC location, Monday through Friday (no telecommuting or compressed schedules). Qualified candidates should submit a cover letter, resume/vita, and publications list to aptima_personnel@aptima.com.

All applicants selected will be subject to a government security investigation and must meet eligibility requirements for access to classified information.

AFFIRMATIVE ACTION EQUAL OPPORTUNITY EMPLOYER M/F, VETS/DISABLED