



ANALYTICS, MODELING, & SIMULATION RESEARCH ASSOCIATE: BEHAVIOR CLASSIFICATION & PATTERN RECOGNITION Boston • DC • Dayton

NOTE: Preference will be given to those candidates who can be located in Aptima's DC or Dayton office locations.

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 passionate, creative scientists/engineers at the beginning of their careers who wish to focus on mathematical modeling, optimization, 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 should possess strong skills in problem analysis and mathematical formulation.

Minimum Requirements:

- Bachelor's degree in an applied mathematical modeling discipline (e.g., Electrical and Systems Engineering, Applied Mathematics, Computer Science, Operations Research)
- Exposure to optimization and probabilistic classification, inference, or control models. The candidate must have understanding of underlying theories and relevant undergraduate research/course work that included algorithm implementation in an area such as:
 - Bayesian decision theory; Maximum Likelihood, Bayesian, and posterior parameter estimation
 - Hidden Markov Models; Markov or Conditional Random Fields
 - Optimization and function approximation algorithms
 - Non-parametric classification (including clustering methods, decision trees)
- Experience implementing complex algorithms and models in Matlab, C++, C#, Java, or R
- Superior oral and written presentation skills
- U.S. citizenship

The ideal candidate will also possess at least two of the following qualifications:

- Knowledge of basic software/data design methods and modeling standards
- Knowledge of efficient data structures
- Software engineering experience or experience collaborating with a software engineering team

Aptima will not compensate applicants for any travel or relocation expenses to fill this position. All applicants must be willing to work onsite in one of Aptima's office locations, 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.

EQUAL OPPORTUNITY EMPLOYER M/F, VETS/DISABLED