

## Position Announcement

### Research Associate/Programmer (Artificial Intelligence)

Knexus Research Corporation, an intelligent systems research company located in Springfield, VA, is looking for a Research Associate/Programmer to conduct research in artificial intelligence (AI). We provide a flexible and casual environment for creative and motivated individuals who thrive on intellectually challenging research and development projects. We offer a competitive compensation package that includes health and retirement benefits.

We are looking for an individual with strong experience supporting AI research, knowledge engineering, and programming. AI topics of interest include cognitive architectures, spatial reasoning, natural language, and machine learning. Experience with implementing or integrating natural language parsers and interpreters is desirable. The candidate must possess good communication and interpersonal skills, must be able to work independently and in teams, and should be able to pick up new research topics and skills quickly.

This position would give you the opportunity to contribute to cutting-edge research, support the development of new technologies, and see your ideas published and become part of scientific discourse. You would be a supporting member of a small team dedicated to a research topic, and part of a larger intellectual community through which you will be exposed to ongoing research.

### Duties and Responsibilities

- Support and conduct research in natural language understanding, spatial/analogical/diagrammatic reasoning, cognition, and learning
- Perform knowledge engineering and encode representations/models in a cognitive architecture
- Implement, test, and evaluate reasoning and learning algorithms
- Identify, collect, and prepare data sets for empirical evaluation
- Contribute to technical publications and presentations

### Required Experience

- Conducting/supporting research on one or more of the following topics: cognitive architectures, natural language understanding, spatial/analogical reasoning, or machine learning
- Knowledge engineering for an AI tool or environment such as a cognitive architecture, LISP, Prolog, or a rule-based system
- Programming and scripting in conventional computer languages such as Java, C, or Python

### Bonus Experience

- Using and integrating syntactic parsers, semantic interpreters, and working with lexical semantics and grammars (e.g., Combinatory Categorical Grammar)
- Developing and annotating data sets for empirical evaluation
- Integrating virtual environments, games, or simulations
- Publishing in an AI conference or journal

### Qualifications

Masters in Computer Science, Computational Linguistics, or equivalent with 2-4 years experience supporting and conducting AI research. Exceptional candidates with Bachelors degree will also be considered.

### Other

*Work location:* The candidate will be located in one of the Knexus offices near Springfield, Virginia (D.C. Suburb)

*Citizenship:* Green card holder or U.S. citizenship.

*Interview and selection:* Applicant should be prepared to discuss and explain their AI research experience, submit any scientific publications they have authored for review, submit code or knowledge engineering samples, and participate in a programming test.

*Application:* Please send a resume and cover letter to [ai.programmer@knexusresearch.com](mailto:ai.programmer@knexusresearch.com).

*All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, gender identity and expression, age, disability, or Vietnam era, or other eligible veteran status, or any other protected factor.*

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