

**Location: Albuquerque, NM**  
**Full-Time, Temporary**

## What Your Job Will Be Like

We are seeking a Postdoctoral Appointee to join an interdisciplinary research program focused on understanding neural computation at the circuit level. The neural computing group includes researchers with expertise in machine learning, cognitive science, neuroscience, physics, engineering, mathematics, and data analytics. Current research topics of interest include computational models of retina, visual cortex (or the neural circuitry underlying perception), and the hippocampus.

On any given day, you may be called on to:

- Contribute to projects in areas ranging from systems neuroscience to machine learning algorithms to next generation computing platforms
- Design and conduct your own research projects
- Conduct high-quality research, maintain a successful publication record in peer-reviewed journals, and develop collaborations with this vibrant and growing research community

This postdoctoral position is a temporary position for up to one year, which may be renewed at Sandia's discretion up to five additional years. The PhD must have been conferred within five years prior to employment.

Individuals in postdoctoral positions may bid on regular Sandia positions as internal candidates, and in some cases may be converted to regular career positions during their term if warranted by ongoing operational needs, continuing availability of funds, and satisfactory job performance.

## Qualifications We Require

- PhD in Neuroscience, Computer Science, Physics, Mathematics, or related field
- Experience with neuroscience research methods and data analysis
- Good communication skills and research record as evidenced by a history of publication of results in peer-reviewed journals and external presentations at appropriate scientific conferences
- Ability to obtain and maintain a DoE Q clearance

## Qualifications We Desire

- Demonstrated abilities in mathematical and computational modeling of neural or cognitive function
- Previous research experience in a sensory system
- Experience with biologically-inspired machine learning algorithms
- Experience developing in at least one C-derived programming language (C, C++, C#, Java, etc.), or with a neural simulator (NEURON, PyNN, NEST, etc)
- Laboratory experience in any of: electrophysiology, neural imaging, connectomics, pharmacological manipulations combined with measurement of neural activity
- Demonstrated ability to contribute to multidisciplinary teams
- Familiarity with advanced computing platforms (e.g. high performance computing, GPUs, FPGAs)
- Evidence of strong academic achievement

## About Our Team

The Data-driven and Neural Computing Department conducts science, technology, and research and development in human-machine interface technologies, algorithms for data-heavy applications, and brain inspired computing. Examples include computational modeling of neural and cognitive processes, cognitive software agents, conventional compute platforms, advanced architectures based on integrated commodity components, data-centric computer platforms, and neural architectures and algorithms. Some of our core technologies emulate and augment human cognition using algorithms ranging from machine learning to detailed physiologically-based models of perception and cognition.

## To Apply:

Visit:  
[sandia.gov/careers](http://sandia.gov/careers)  
and search for job  
number **658202**

## About Sandia:

Sandia provides employees with a comprehensive benefits package that includes medical, dental, vision, and a 401(k) with company-match. Our culture values work-life balance; we offer programs such as flexible work schedules with alternate Fridays off, on-site fitness facilities, and three weeks of vacation. In addition, Sandia/California enjoys close proximity to San Francisco, the Silicon Valley, first-tier universities, and diverse cultural and year-round recreational opportunities.

Sandia National Laboratories is the nation's premier science and engineering lab for national security and technology innovation. We are a world-class team of scientists, engineers, technologists, post docs, and visiting researchers all focused on cutting-edge technology, ranging from homeland defense, global security, biotechnology, and environmental preservation to energy and combustion research, computer security, and nuclear defense.