



# Carnegie Mellon University

## Postdoctoral positions in neural image analysis and computational neuroscience

Two full-time postdoctoral positions in neural image analysis and computational neuroscience are available immediately at Carnegie Mellon University (CMU). Recent advances in microscopy techniques and fluorescent sensors have revolutionized how neurobiologists study the activity in neural circuits during behavior and learning. These methods can gather image data for the many different types of neuronal cells that compose neural circuits, but the data are complex, and standardized analysis techniques are needed. The research projects for the postdoctoral positions will focus on developing and applying image processing, computer vision, and related computational techniques for analyzing calcium imaging data and for understanding related neural circuit activities.

Successful candidates will join the labs of Ge Yang (Department of Biomedical Engineering & Department of Computational Biology) and Sandra Kuhlman (Department of Biological Sciences & Center for the Neural Basis of Cognition) and will interact with world-class research programs at CMU in neuroscience, bioimage informatics, computer vision, machine learning, and related areas.

**Requirements:** The projects are highly quantitative and interdisciplinary. Applicants should have a Ph.D. in Biomedical Engineering, Electrical Engineering, Computational Neuroscience, Computer Science, Applied Mathematics, Physics, or a related field. Qualifications include a strong research background in image analysis, computer vision, computational neuroscience, computational biology, statistical neuroscience, machine learning, or a related field. Background in image analysis and signal processing will be particularly valuable.

The initial appointment will be for one year, and is renewable. Salaries will be set based on experience and skills. Applications should be sent by email to [geyang@andrew.cmu.edu](mailto:geyang@andrew.cmu.edu) and [skuhlman@andrew.cmu.edu](mailto:skuhlman@andrew.cmu.edu) with the following documents:

- A one-page summary of past research experience
- A one-page summary of future research interests and aims
- An up-to-date CV of research and education experience, including publications
- Names of three referees for letters of recommendation

All materials should be in PDF or plain text. Applications will be reviewed upon receipt until the positions are filled. Interested candidates are encouraged to apply early.