

The College of Letters and Sciences on the Polytechnic campus of Arizona State University invite applications for a Postdoctoral Research Associate position to do research and analysis on a new Gulf of Mexico Research Initiative (GomRI) ecological grant. In close collaboration with senior faculty and research personnel, the applicant will conduct quantitative statistical analyses and computer programming to build ecological models. Such models will represent fish population dynamics, coral growth and coral reef dynamics, as well as human uses in the marine ecosystem. The incumbent will also have the opportunity to develop their own parallel research related to these research themes. Their primary task will be to assist the PI with a newly funded research project which considers the effect of the Deep Water Horizon oil spill on fishing communities and fish populations in the Gulf of Mexico using agent-based modeling and statistical analysis of fisheries datasets.

This is a full-time (1.0 FTE), benefits-eligible, year-to-year appointment. Renewal is possible on an annual basis for up to three years. For additional information and policies regarding postdoctoral scholars at ASU, please see <https://provost.asu.edu/academic-personnel/postdoc> Salary is \$50,000.00 - \$55,000.00/year (commensurate with experience).

#### **ESSENTIAL FUNCTIONS**

Successful candidates will: Expand and build on an existing agent-based model of Gulf of Mexico fisheries programmed in Java; develop new models and novel quantitative approaches toward addressing ecological questions using numerical, statistical, and/or agent-based modeling approaches; conduct statistical analyses and manipulation of large, confidential, fisheries and remotely sensed datasets; initiate parallel research in a similar area of investigation; review and critique reports and analysis of other researchers; write results for reports and peer review publications, and collaborate with team members to produce journal manuscripts, abstracts and other publications of research findings; present results at professional meetings, conferences, and other forums; mentor and train students, and assist researchers and staff with scientific computer programming; assist in seeking external grant funding from agencies, organizations, foundations, and other groups.

Qualified candidates must have a Ph.D. or expect to receive a Ph.D. in a theoretically relevant field of study (e.g., ecology, biology, marine science, computer science, statistics, and/or mathematics) by the start of the appointment.

#### **Required Qualifications:**

- Computer programming skillset and fluency in multiple programming languages.
- Experience conducting statistical analyses
- Demonstrated high scientific productivity or capacity for productivity in publishing high quality research papers.

#### **Desired Qualifications:**

- Knowledge and experience working with the Multi-Agent Simulator of Neighborhoods (MASON) Java programming library.
- Experience analyzing fisheries and/or remote sensing data.
- Experience programming in C.
- Experience with parallel and distributed programming on Linux clusters.
- Ability to develop and maintain interactive project web pages.

#### **Application Procedure:**

To apply, visit <https://cls.asu.edu/jobs> and upload your application as one combined .pdf document under job number 11535. Only electronic submissions will be reviewed. Incomplete applications will not be considered. Applications must contain:

1. A letter of interest outlining qualifications and experience as it relates to the position, and a short description of related research the incumbent would be interested in pursuing.
2. Curriculum vitae
3. Unofficial graduate transcripts
4. Information for three professional references (their position, title, e-mail, phone number)

The application deadline is 05/12/2016 at 5pm; and if not filled, every Friday thereafter until the search is closed. Direct inquiries to Search Committee Chair Dr. Steven Saul at [Steven.Saul@asu.edu](mailto:Steven.Saul@asu.edu) Initial interviews may be conducted via Skype or phone.

*Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will be considered without regard to race, color, sex, religion, national origin, disability, protected veteran status, or any other basis protected by law. (See ASU's complete non-discrimination statement at <https://asu.edu/aad/manuals/acd/acd401.html>; see ASU's Title IX policy at <https://www.asu.edu/titleIX/>)*

ASU offers applicants an opportunity to voluntarily self-disclose information for the University affirmative action plan; applicants may complete an EEO survey for the position they are applying for online. Information you will need to complete the survey: Job Number: 11535; Job Title: Postdoctoral Research Associate; Department Name: College of Letters and Sciences.

**General Information:** Arizona State University is a comprehensive public research university recently named #1 in the United States for innovation, followed by #2 Stanford and #3 MIT. We measure our success not by whom we exclude, but rather by whom we include and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities we serve. ASU's College of Letters and Sciences is home to innovative teachers who are guided by educational access, student success, applied learning, and interdisciplinary inquiry. We understand there are many paths to achieving a university education, and we build undergraduate and graduate degree programs and pathways that are flexible and relevant for a rapidly changing world. To learn more about ASU and the College of Letters and Sciences go to: <http://about.asu.edu/> and <http://cls.asu.edu>.

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