

We are seeking motivated individuals to work in the Geotechnical and Structures Laboratory as computational engineer or scientist.

### PUBLIC NOTICE FOR POSITIONS FILLED UNDER DIRECT HIRE AUTHORITY (DHA) FOR: Bachelor's Degree and Advanced Degree candidates under Science and Technology Reinvention Laboratory (STRL) Personnel Demonstration (Demo) Projects

**Opening and Closing Dates:** February 3, 2022 – May 6, 2022

Position Title: Research Interdisciplinary (title determined by education background)

Series/Grade: DB-XXXX-02 or DB-XXXX-04

Full Performance Level: DB-04

Duty Location: Vicksburg, MS

Salary Range: \$36,118 - \$144,976

Work Schedule: Full-time

Appointment Type: Permanent

**Travel Requirement:** 10% or more Temporary Duty Travel may be required.

#### Who May Apply: All U.S. Citizens

**Responsibilities/Duties:** Serves as a Research and Development (R&D) Engineer or Scientist responsible for executing and managing research projects related to the fields of geotechnical and structural engineering, and geosciences in one or more of the following areas:

- soil and rock mechanics,
- geology,
- earthquake engineering,
- electromagnetic and geophysical sensing,
- survivability and protective structures,
- blast and weapons effects against structures and geo-materials,
- infrastructure and structural systems,
- high-performance materials,
- multi-scale material characterization and modeling,
- vehicle mobility and maneuver,
- pavements technology and transportation systems, and
- high-performance computing & analysis.

Develops proposals and test plans to solve complex engineering problems. Analyzes statistical or numerical data and prepares interim and final reports. Applies numerical modeling to basic research applications, such as computational fluid dynamics (CFD), computational structural mechanics (CSM), computational electromagnetics and acoustics (CEA), and/or computational chemistry and materials (CCM). Applies computer programming across several platforms and languages for developing optimized numerical codes. Designs and performs complex laboratory and field experiments as well as live

technology demonstrations in both computationally simulated and real-world environments. Transfers technology to the nation and warfighter by developing technical publications, guidance documents, and/or software and web applications. Works with organization leadership to coordinate R&D endeavors and effectively communicates with teams, sponsors, and stakeholders. Ability to direct and manage personnel is required.

**Qualifications Requirements:** To qualify for this position at the DB-02 level, you must meet the Basic Requirements. To qualify at the DB-04 level you must meet the Basic Requirements AND the required Specialized Experience.

**Basic Requirements:** Please visit the links below to review the Basic Education Requirements for each series included in this announcement:

OPM's Individual Occupational Requirement (IOR) for the **0801**, **0810**, **0830**, **0850**, **0854**, **and 0861** job series is defined as:

https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualificationstandards/0800/files/all-professional-engineering-positions-0800.pdf

OPM's Individual Occupational Requirement (IOR) for the **1301 job series** is defined as: <u>https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/1300/general-physical-science-series-1301/</u>

OPM's Individual Occupational Requirement (IOR) for the **1310 job series** is defined as: <u>https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/1300/physics-series-1310/</u>

OPM's Individual Occupational Requirement (IOR) for the **1350 job series** is defined as: <u>https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/1300/geology-series-1350/</u>

OPM's Individual Occupational Requirement (IOR) for the **1520 job series** is defined as: <u>https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/1500/mathematics-series-1520/</u>

OPM's Individual Occupational Requirement (IOR) for the **1550 job series** is defined as: <u>https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/1500/computer-science-series-1550/</u>

# To qualify at the DB-04 level you must meet the Basic Requirements for one of the job series listed above in addition to the required Specialized Experience listed below:

**Specialized Experience required to qualify for the DB-04:** You must possess one year of specialized experience equivalent to the DB-02 (GS-11) level or higher in Federal service (or private sector equivalent) demonstrating experience: 1) Applying the principles, concepts and methodology associated with engineering, computer science, physical science and/or mathematics; 2) Applying engineering, mathematical, and/or scientific methods and procedures in routine research, projects and/or studies; AND 3) Preparing scientific reports that reflect collected data and interpretation.

All qualification requirements, including time after competitive appointment, must be met by the closing date of this announcement.

#### **Conditions of Employment:**

- Must meet suitability for Federal employment
- Will be required to provide proof of U.S. Citizenship
- Male applicants born after December 31, 1959 must complete a Pre-employment Certification Statement for Selective Service Registration
- Must have a valid drivers license
- Obtain and maintain a Secret or higher Security Clearance

#### How to Apply:

Please provide your current resume and transcripts (unofficial copies are acceptable, but must be in a readable [preferably .pdf] format and reflect all related coursework and degree date)

- 1) Via Email: to: gslcareers@usace.army.mil
- 2) Please ensure your email has the following subject line: DHA Applicant for Computational Position
- *3)* Application packages will be accepted through 11:59pm CT on <u>5/6/2022</u>

## Application packages that are received after the closing date, or do not

#### contain resume and transcripts will not be considered.

Disclaimer: You are about to provide person data. By completing this online application, you are authorizing the US Army Engineer Research & Development Center (ERDC) to use this data in the recruiting, application, and selection processes. The information collected will be accessible to ERDC employees relevant to such processes.



US Army Corps of Engineers.