Interactive 3D Visualization Developer
Christa McAuliffe Center/3D Educational Services, Inc

GENERAL STATEMENT OF DUTIES:
The Interactive 3D Visualization Developer Intern will create interactive 3D visualizations and renderings using NASA data in order to create Earth observation simulations and models of the International Space Station. The products created will be used to enhance participant learning about current NASA missions to areas of study on the International Space Station. The Intern will develop enhancements for the McAuliffe Center’s Challenger Learning Center Earth Odyssey simulated space mission that will focus on observing Earth from the International Space Station, with an emphasis on analyzing climate data. The 3D interactive visualizations and renderings will be developed using WebGL based tools allowing for a broad distribution to other educational facilities. McAuliffe Center staff acting at subject matter experts will support the Interns work and 3D Educational Services, Inc. staff will serve as technical support.

Examples of Specific Duties & Responsibilities:

- Conversion of relevant NASA CAD (.STL or .OBJ) files to WebGL renderings
- Assist in the development of interactive simulations based on NASA missions, spacecraft and areas of study
- Connect with provided subject matter experts in order to create accurate simulations
- Design and build applications in Java using Play framework
- Programming JavaScript, WebGL and HTML5

Requirements:

- Coursework in Computer Science
- Experience working with HTML5, JavaScript and WebGL is a must
- Experience with Blender software (www.blender.org) is a must
- Knowledge of WebGL APIs like 3JS and/or blend4web is preferred
- Familiarity with MySQL database, C++, Java and Play framework is preferred
- Experience with commercial 3D CAD packages is preferred
- Exposure to Linux/Unix platforms and GitHub.com

How to Apply:

- Submit a résumé that includes all related coursework
- Submit a one-page cover letter that addresses the following questions: Why are you interested in this position? What skills can you bring to the position? What do you hope to get out of this experience?
- Submit name and email address for three references. Two of your three references must be professors with whom you have studied.
- Email all application documents to both iporro@framingham.edu and epagliuca@framingham.edu
- Application deadline: April 10, 2020

Additional Information:

Framingham State University conducts Criminal Offender Record Information (CORI) checks relative to prior criminal convictions and pending cases, as well as Sex Offender Registry Information (SORI) checks relative to prior sexual offenses committed as an adult or juvenile on final candidates prior to an offer of employment for all positions. Framingham State University
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requires specific written authorization to conduct background checks. Failure to provide such authorization shall preclude your application from receiving further consideration.

Framingham State University is an equal opportunity/affirmative action employer.

Members of underrepresented groups, minorities, women, veterans, persons with disabilities, and all persons committed to diversity and inclusive excellence are strongly encouraged to apply.