



Applied Research in Acoustics LLC

Title: **Summer Intern**

Location: Culpeper, VA office

Applied Research in Acoustics (ARiA) applies broad interdisciplinary expertise in acoustics, modeling & simulation, signal processing, and cognitive science toward innovative science and engineering research and development for a diverse set of government and corporate clients that focuses on modeling & simulation for training and model-based signal-processing and artificial intelligence for detection and classification. Partnering with government, industry, and academia, ARiA solves critical challenges in national security.

To enable effective and efficient transition of applied research to advanced development of products and systems, ARiA is structured to bring together top-quality research scientists with development and software engineers in an environment in which research and development mutually benefit from joint leveraging of in-house expertise.

Headquartered in Washington, D.C., with offices in Culpeper, VA, ARiA is a privately held company founded in 2010 by Chief Scientist Jason E. Summers. Opened in 2013, the Culpeper office is located in [historic downtown Culpeper, VA](#) — a destination location, [growing tech hub](#), and winner of the 2012 Great American Main Street Award. The downtown area offers the best in locally sourced food, fine dining, and traditional comfort food, and even a local microbrewer, cheese shop, chocolate shop, wine shop, and more ...all within a couple of blocks. Downtown is also home to a number of small businesses, the recently renovated [State Theatre](#), and a diverse mix of residential housing — many employees choose to live in walking distance of the office. The office itself is an ideal space for both collaborative work and deep thinking — a brick warehouse built in the early 1900s, specifically refurbished for our needs, with high ceilings, exposed beams, windows in every room, plenty of natural light, and a mix of shared and private work spaces equipped with top-quality chairs from Herman Miller and Knoll, Lenovo ThinkStation workstations, and NEC monitors.

For more information, visit www.ariacoustics.com.

ARiA: Real Research. Real World.™

ARiA is an Equal Opportunity Employer.

Position Description:

Entry-level Summer Intern (0-2+ years of experience with game design and 3D model generation)

40 hours / week (hourly employee), summer 2015

Intern to support development of ARiA's WaveQuest underwater-acoustics education and training video game and E-SAIL: the Environment for Surface Antisubmarine Warfare (ASW) Interactive Learning, working in close coordination with ARiA scientists and engineers.

Responsible for:

Development of art assets (ships, submarines, undersea life) for the WaveQuest and E-SAIL

Assisting with level design and play testing to support prototypes and products

Interfacing with game-design team for WaveQuest

Interfacing with modeling and simulation engineers from software-development team

Sample tasks:

Developing 3D models of Naval ships in Blender for import into Unity for E-SAIL

Level design for WaveQuest

Requirements:

Pursuing a Bachelor's degree in Game Design or equivalent

Facility with Unity3D and 3D design tools such as Blender

Completion of at least one sizable game-design or art asset project

Exceptional ability and desire to acquire new knowledge and skills to solve challenges

Ability to work independently but collaboratively

Ability to manage multiple projects in a fast-paced professional office environment

Ability to communicate technical solutions to project management and the development team

Good oral and written communications skills

Applicants selected for employment may be subject to a government security investigation and must meet eligibility requirements, including U.S. citizenship, for access to sensitive information.

Desirable Skills, Qualifications, and Experience:

Exposure to or interest in the underwater environment and naval vessels

Exposure to or interest in concepts from college-level physics/engineering (acoustics, wave propagation, sonar)

Interested applicants should submit a resume and cover letter to HR@ariacoustics.com