ARA’s team of professional software developers provides innovative solutions to complex real-world problems. Our proven track record across the technical fields of computer applications, design, web services, engineering, systems and multi-platform development coupled with our project management expertise offers a comprehensive and efficient computer sciences program, transforming our customer’s requirements into high quality useable tools and applications.

Web-based Solutions - Web applications are more than just a collection of static web pages with flashy graphics. ARA develops large, scalable complex websites - dynamically interactive with databases, multiple levels of security and creative graphic design. We utilize ASP.NET 2.0, PHP, JavaScript, DHTML, Oracle Application Express, Oracle, SQL Server, MySQL, and Flash multimedia development tools. ARA hosts a number of secure websites and provides offsite back-up support.

Enterprise Development - We develop Java web services to provide interfaces to existing online databases and perform data extraction and transformation for our client’s decision support tools. ARA utilized Oracle Application Server to develop services that support integration of complex regulatory web applications for the U.S. Army Corps of Engineers and JEE components to implement health effects and medical response models for assorted nuclear, chemical and biological threats for the Defense Threat Reduction Agency (DTRA).

GIS Applications - ARA has experience in developing intuitive GIS user interfaces that do not require end user GIS knowledge. Our computer scientists use ESRI MapObjects and the ArcGIS object model, Oracle Spatial and Oracle Map Server, and Google Earth applications. We have produced both stand-alone applications with GIS components as well as GIS extensions for standard GIS viewers such as ESRI’s ArcView™. ARA develops GIS applications for coastal engineering, environmental impact studies, military mobility, and security engineering challenges.

Scientific & Engineering Applications - Software tools developed by ARA support many engineering disciplines including security engineering, security risk management, coastal & hydraulic engineering, environmental sciences, mobility/military engineering, complex numerical analysis of weapons & explosive effects, CBRN effects and civil engineering applications. A number of ARA software tools have become industry standards.

3D Visualization - ARA has developed a number of real-time 3D visualization tools that depict complex views of structural response to explosives, blast effects to various elements, materials and weapons effects tools and animated human behavior simulations for life/safety analysis and emergency facility evacuations.
Selected Clients
- City of Vicksburg, MS
- Defense Threat Reduction Agency
- Department of Commerce
- Dubai Municipality
- Environmental Protection Agency
- Federal Protective Service
- General Services Administration
- Internal Revenue Service
- My Safe Florida Homes
- Office of Personnel Management
- Smithsonian Institution
- Social Security Administration
- Technical Support Working Group
- U.S. Air Force
- U.S. Army Corps of Engineers
- U.S. Fish & Wildlife Service