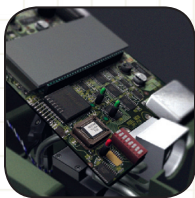


**ECBC ENGINEERING**  
Design→Build→Test→Support

# ECBC ENGINEERING PRODUCT DEVELOPMENT FACILITY ADVANCED DESIGN AND MANUFACTURING CONCEPTUAL MODELING AND ANIMATION

## OVERVIEW



ADM's Conceptual Modeling and Animation Branch is an interdisciplinary group combining expertise in Computer Science, Industrial Design, and Computer Animation. Our emphasis is on the creation of precise virtual models, constructive models, and realistic animations for concept development, design studies, interactive training aids, and

informative multimedia within very short customer driven timelines. The branch's diverse expertise and direct coordination with ADM's engineers and scientists allow us to rapidly respond and deliver realistic concepts and designs as short as a few hours upon request in direct support of the Warfighter and homeland defense.

## CONCEPTUAL DESIGN



The ability to accurately represent a customer's vision by creating specific visual depictions has become a proven capability of our branch. Collaborating with mechanical, electrical, and manufacturing engineers allows for the rapid development of models varying from conceptual to detailed engineering models.

## ANIMATION



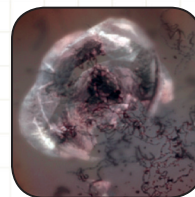
Animation provides a capability that extends beyond the limitations of a static image. It can provide a sense of time, utilize sound and audio, and convey ideas and concepts through a more persuasive media. Implementing state of the art animation tools, ADM enhances the capability to immerse the viewer within a defined environment. This is particularly

useful for scenario operations and is used to create our high-end 3D animation vignettes. Editing tools allow for the addition of various 2D and 3D elements including particles, text, visual filters, and a multitude of special effects. In-house composed music, audio, and narration is added to enhance the final presentation.

## SCIENTIFIC AND RESEARCH APPLICATIONS

By utilizing the expertise of the scientific and research community within the Edgewood Chemical and Biological Center, and its many partners, the branch can produce accurate and complex scientific renderings and animations. Complex organic, chemical, and microbiological renderings and animations are used to support various scientific research efforts and products which would be impossible to capture visually without advanced 3D computer technology and the highly skilled artists and animators.

## INTERACTIVE SOFTWARE



With the adaptation of existing video game technology, 3D virtual engines and web based tools provide the capability to develop custom interactive virtual environments. The branch's computer scientists, with experience in 3D interactive programming, are able to utilize commercial software as well as develop new interactive applications. The combination

of high level programming with the artistic skill sets of the branch provides a powerful multimedia development capability.

### Features

- Computer scientists with virtual 3D interactive software experience
- Highly skilled and trained artists and animators

### Capabilities

- Conceptual design
- Photorealistic modeling with design intent
- Demonstrative videos and animations
- Interactive multimedia
- Real-time Interactive 3D Environments

### Software

- SolidWorks
- 3D Studio Max
- Alesis music and effects workstation
- Cubase music production software
- Adobe Suite



For more information, please call 410.436.5542 or  
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