

## **Composites-Sculpture-Design**

## **ABOUT ME**

Valencia Community College

Certified Chemical Engineer

**R&D** for a Resin Patent

Work for an A.C.M.A.

Scenic Artist specialized in management of Fiberglass production for the world's major theme parks. My background is in sculpture, mold making, lamination and construction of animatronic figure finish. I created laminate systems, using Flame & UV resistant materials, to write new variances and pass laboratory tests. I also designed armature attachments and worked with engineers as a technical advisor. I am skilled in 3D drawing and design of CNC machine tooling as well as traditional fabrication techniques. As a department manager, I wrote estimates, contracted labor, kept budgets on track and trained crews both on and off site.



(321) 318-4165



andy@andycostello.com

Exhibitions

Singapore

**Touring Event** 

Gardens by the

Global

Bav



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EMPLOYERS	CAREER HIGHLIGHTS	CLIENTS
Animax Designs Inc.     Nashville TN. (2018-2025)     Composite Fabrication Dept.     Manager     Cinnabar Florida     Orlando FL. (2003-2018)     Project Manager, Composite     Fabrication Dept. Manager,     CNC operator, Sculptor     Entech Creative Ind.     Orlando FL. (2001-2003)     Sculptor     Sightline Ind.     Gainesville FL. (1998-2001)     Sculptor	"How To Train Your Dragons" - 3 Large outdoor animatronic Dragon figures designed flame, frost and audio effects to give the guests a highly interactive experience. The figures are mounted on steel motion platforms and made with fire rated resin, carbon fiber and silicone skins. They are integrated with 3D prints and vacu-formed plastic.  "Harry Potter's Ministry of Magic" - 37 animatronic indoor window displays depicting magical elements from the film "Fantastic Beasts and How to Train Them." They consist of over 1000 parts made from fire rated resin, 3D printed nylon, wood, matel and vacual formed plastic.	<b>Universal Studios</b> Epic Universe Orlando
	wood, metal and vacu-formed plastic.  "Super Mario Bros. Donkey Kong Characters" - 24 animatronic and static figures from the Nintendo video games for 2 parks to provide an immersive outdoor experience. They were laminated with fire-rated resin and carbon fiber and integrated with 3D printed nylon and vacu-formed plastic. I designed solutions for the joints, access panels and seams. I also worked with Universal to design and build a large fiberglass structure that could survive 160 mph winds. I hired a subcontractor and trained their team to work with the new laminate system.  "Super Mario Bros. Piranha Plants" – 26 animatronic figures for 3 parks,	Nintendo World Orlando & Japan Nintendo World
SKILLS	laminated with fire-rated resin, vacuum bagged carbon fiber and 3D printed nylon. We made 3 epoxy "hard" molds for the largest figure. The mold frames were	Orlando Hollywood
<ul> <li>Sculpture</li> <li>3D drawing and design (Rhino)</li> <li>CNC file making</li> <li>CNC operation</li> <li>Mold design &amp; manufacture</li> <li>Tooling design &amp; manufacture</li> <li>Vacu-forming</li> <li>Fiberglass laminate design &amp; production</li> <li>Vacuum bag FRP production</li> <li>Part trimming &amp; fit-up</li> <li>3D print integration</li> <li>Automotive body work</li> <li>Wood shop</li> <li>Metal fabrication</li> <li>Quality Control</li> <li>Multiple Lift Certs.</li> </ul>	designed in Rhino and cut on a CNC. These are mainly outdoor figures comprised of several joints, access panels, seams and fasteners. The GPS specs and weight were a major factor also requiring parts to survive 160 mph winds; variances were also submitted to the client. Managed a sub-contractor and conducted Q.C.  "Wizarding World of Harry Potter" – 11 animated window and shop displays for "Diagon Alley" requiring molds, urethane casting and CNC machining. This project featured a 2-story tall "Weasley Man" character who is a focal point in the park. "Hogwarts Castle" – 3 sets of statues (15) for the ride cue line of the "Forbidden Journey" attractions. These were static props for which I designed armatures and made shop drawings.  "Hulk Marquee Statue" – Large statue of the character holding up a ride vehicle. We split the job up in Rhino so the Hulk figure could be carved in slices on the 3 axis CNC, re-assembled, molded and then cast in sections. The Ride Vehicle was digitally split and carved in slices to make negative tooling. I programed and operated the CNC as well as managed the crew for the molding, casting and fitup of the figure to the armature.  "Einding Nemo's Crush and Squirt Puppets". 3 sets (12 total) vacuum bagged.	& Japan Universal Studios Orlando Hollywood Japan Universal Studios Orlando
	<ul> <li>"Finding Nemo's Crush and Squirt Puppets" – 3 sets (12 total) vacuum bagged carbon fiber "turtle" shells laminated with FR resin. Weight and strength were a crucial factor in the success of these stage puppets.</li> <li>"Toy Story Land" – 76 giant, outdoor "Tinker Toy" FRP discs and cylinders used to house speakers, wi-fi hubs and other electrical needs as decorative elements." 16 hard molds were made; FR Resin was used. I became a project manager on this as well as a head of production.</li> </ul>	Disney Cruise Lines FL Hollywood Studios Orlando
EDUCATION	<b>"Star Wars"</b> – 6 large "Water Condensers" made to conceal speaker enclosures. This required integration of CNC machined pieces with molded and cast FRP. I	
<ul> <li>Bachelor's Degree in Sculpture University of Florida</li> <li>Technical Certificate CAD</li> </ul>	managed the crew and assembled the FRP.  "Jurassic World The Exhibition" – 14 animatronic Dinosaurs. These are highly textured indoor figures comprised of many joints, access panels, seams and fasteners. Weight and strength were a major factor in these figures made from E-	<b>Neon</b> Victory Hill Exhibitions

glass, carbon fiber and 3D printed nylon.

printed nylon and silicone skins.

"Avatar Experience" – 1 "life size" animatronic Banshee and 7 static character

props including Navi family and wildlife. Mainly FRP body shells integrated with 3D

<sup>\*</sup> Photos and references available upon request!