

SCULPTOR

"Optimal Solutions has deep experience in the real-world problems faced by CFD engineers. We set out to focus on automating the process by which designs can be parameterized and optimized to dramatically reduce the time it takes an engineer to arrive at the "optimal solution". By leveraging HOOPS as our application framework and core graphics engine, we were able to fully apply our expertise and create an innovative product, while HOOPS helped give our product a professional look and feel that we would not have been able to otherwise deliver."

Mark Landon, President

Business Profile

Product Using HOOPS
Sculptor

More Info
www.optimalsolutions.us

Industry
CAD Data Translation

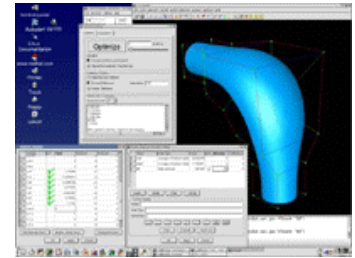
TS3D Products
HOOPS/3dAf

Company Brief

The team at Optimal Solutions has an extended history of consulting in the CFD industry. In the course of its many consulting projects, this team had developed in-house analysis tools, which over time, evolved into a sophisticated package. In 2001 Optimal set out to commercialize that solution as a general package useful to CFD engineers. Thus, Sculptor was born.

The Challenge

Optimal Solutions had three main challenges. First, the company was a cash-strapped start-up; it needed to get a cross-platform, commercial-grade product to market quickly to start generating revenue. Second, Optimal wanted to maximize the value of that product in a competitive market; it sought to focus its precious resources on Optimal's true area of expertise - CFD shape deformation and design optimization. Third, because its talented team was lacking in graphics experience, the firm required a toolkit that was easy to learn and that had a powerful and straightforward API.

**The Solution**

Optimal Solutions worked along with TS3D reseller Spatial to evaluate HOOPS/3dAF. The Optimal team members found in TS3D's product just the kind of high-level, complete solution they were looking for. HOOPS/3dAF provided a massive jump-start to Optimal's development effort and enabled the team to easily add new capabilities. Combined with the Qt UI toolkit, from TS3D partner TrollTech, HOOPS/3dAF helped make Sculptor a high-performance solution with a professional look and feel that extended across all platforms, including Unix, Linux and Windows.

The Results

- Optimal Solutions was able to keep its original team lean and focused, thereby holding down R&D expenses during the critical start-up phase.
- By focusing on its core expertise, Optimal Solution delivered a product to the market that offered significant and recognizable value for CFD engineers.
- HOOPS/3dAF enabled a small start-up to deliver a product with the types of graphics - high-performance and visually-rich graphics —the CFD market expects.
- Optimal Solutions estimated that the company shipped Sculptor a year sooner than would have otherwise been possible. This faster time-to-revenue enabled the company to begin investing in growing its R&D and marketing teams.

About Tech Soft 3D

HOOPS toolkits from Tech Soft 3D (TS3D) dramatically simplify the design, development and maintenance of high-performance, interactive 2D/3D engineering software. HOOPS components are part of over 175 commercial software applications that run on millions desktops worldwide. Headquartered in Berkeley, CA, TS3D is on the web at <http://www.techsoft3d.com>. For more information, contact Ron Fritz, Managing Partner: 510.883.2180 x 201 or ron@techsoft3d.com.