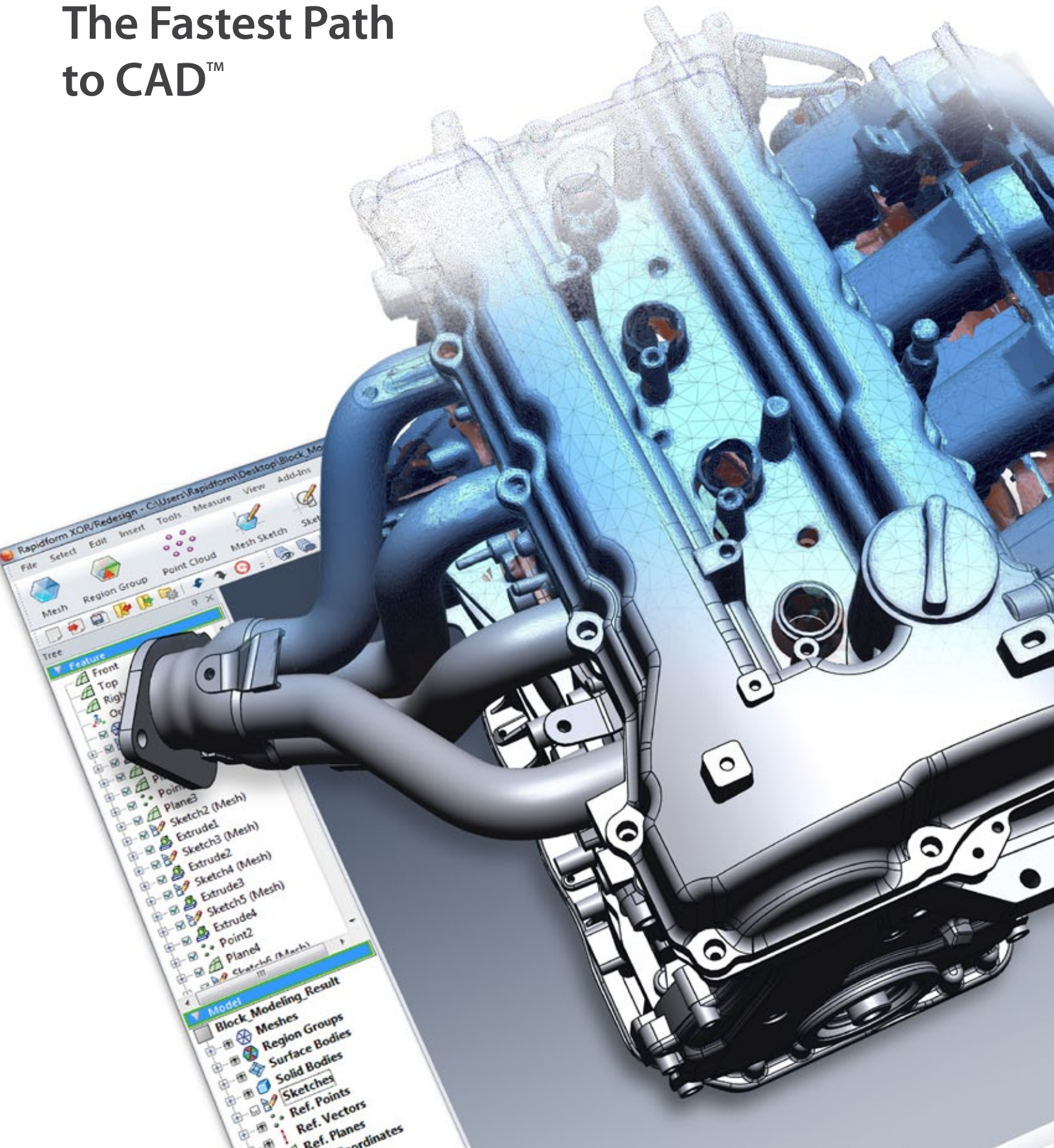




The Fastest Path to CAD™





RAPIDFORM® XOR/REDESIGN™

Convert Physical Objects to Real CAD Models

With Your 3D Scanner and RAPIDFORM® XOR™

Accelerate Time to Market

Shave days or weeks out of the product development process by compressing the time needed from idea to finished design. Scan prototypes, existing parts, tooling parts or related objects and create designs in a fraction of the time it would take to manually measure and create CAD models.

Leverage Existing Assets

Every design is inspired by another. Make use of the intellectual property that's locked up in every physical object; learn from it, reuse it, improve on it.

Do the Impossible

Create products that cannot be designed without reverse engineering. Customize parts that require a perfect fit with the human body. Create components that integrate with existing products, accurate down to a few microns. Recreate complex geometry that cannot be measured any other way.

Reduce Costs

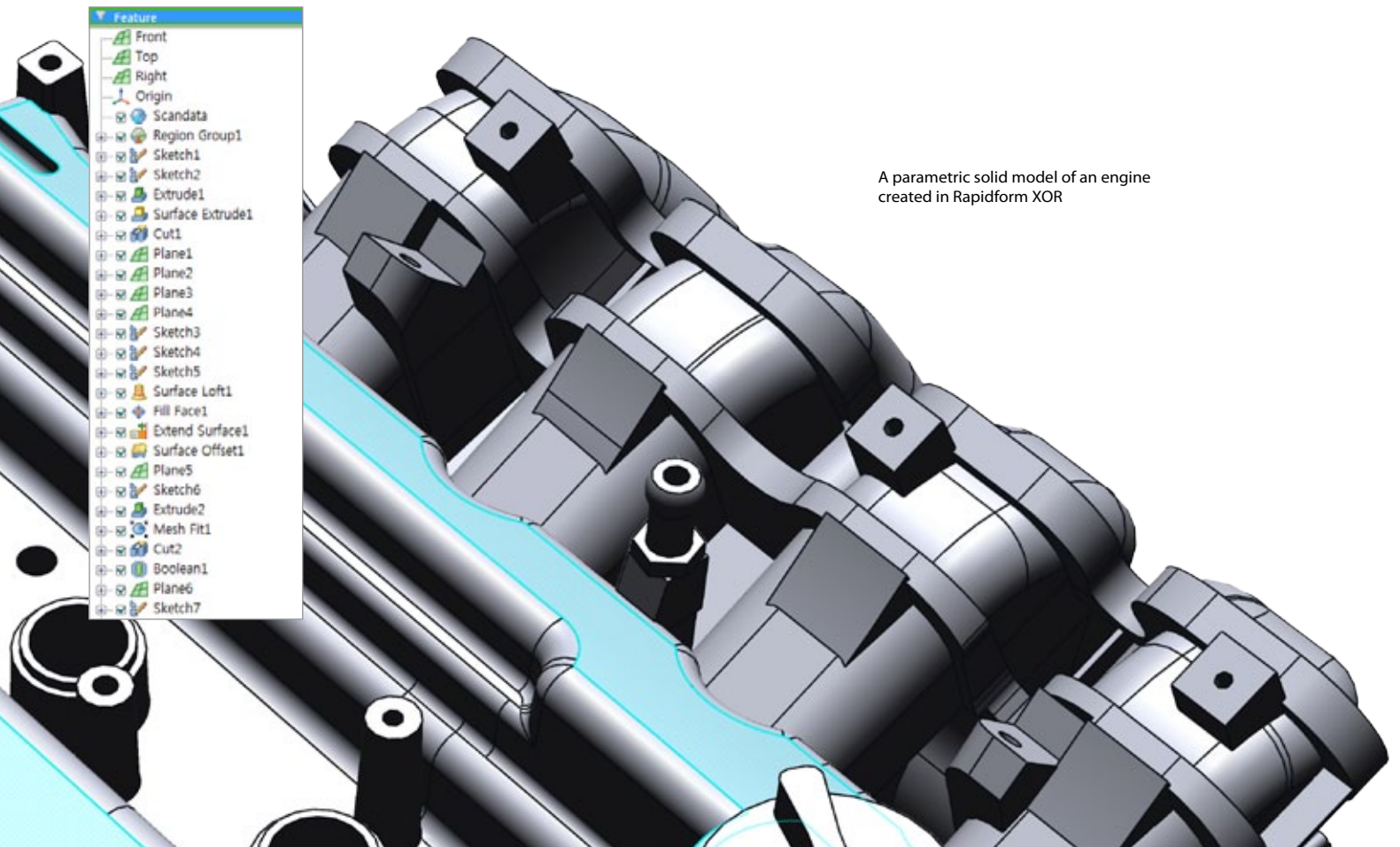
Reuse existing designs, without having to manually update old drawings or painstakingly measure and rebuild a model in CAD. Reduce costly errors related to poor fit with other components.

Bring the Power of Digital Design to the Real World

Leverage the power of your digital design process. Convert physical objects into 3D models so you can apply CAD, CAE, CAM and all the other tools in your digital design environment.

Design with Confidence

Know that the products you design will fit perfectly with whatever you need them to. Need a part to fit within an existing design? Scan it and design around it.



A parametric solid model of an engine created in Rapidform XOR

The Fastest Path to CAD

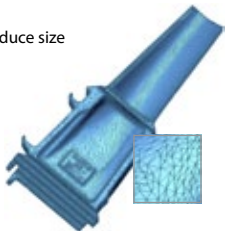
Workflows

Scan to Mesh

For archiving, animation, measurement, 3D printing and other polygon-based applications, Rapidform XOR includes a full suite of mesh processing tools. With the Mesh Buildup Wizard™, you can go through the entire scan alignment merging and mesh optimization processes with just a few clicks.

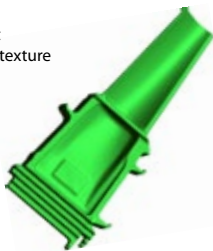
Mesh Optimization

- Smooth
- Fill holes
- Optimize/reduce size



Mesh Modeling

- Deform
- Thicken/offset
- Apply color & texture



Export

Save as STL, OBJ or other mesh formats for archiving, 3D printing, rendering, or CAE use

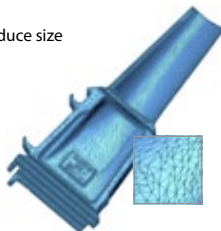


Scan to Surfaces

Rapidform XOR also supports NURBS surface fitting, which is useful for creating an identical copy of scan data that does not need editing. You can use Rapidform's powerful automatic surfacing technology to do the work for you, or take control and lay out the surface network just the way you want.

Mesh Optimization

- Smooth
- Fill holes
- Optimize/reduce size



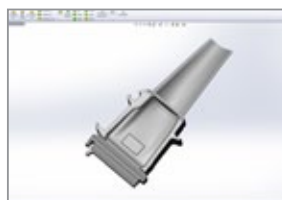
NURBS Surfacing

- Auto Surfacing
- Interactive surfacing



Export

Save as IGES, STEP or other surface formats for non-parametric use



Scan to CAD

To make a CAD model suitable for manufacturing, Rapidform XOR employs a straightforward workflow that parallels today's well-known solid modeling processes. Instead of modeling from scratch, Rapidform XOR's feature wizards and other automated tools help you build the features directly from 3D scan data.

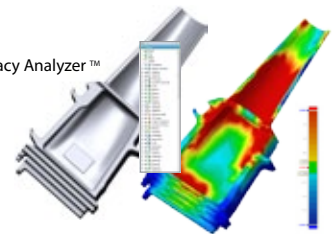
Mesh Optimization

- Smooth
- Fill holes
- Optimize/reduce size



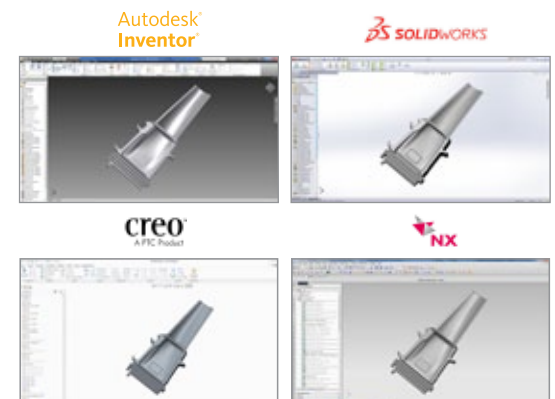
Solid Modeling

- Extract design intent
- Build CAD model
- Confirm quality with Accuracy Analyzer™



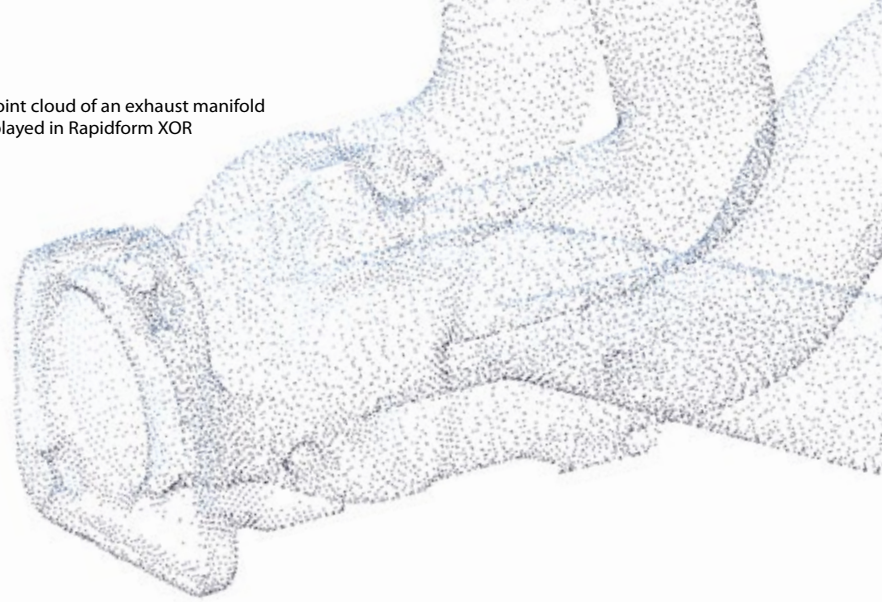
Export

Transfer to your CAD software as a native model with design history and parameters



Native file export for CATIA V4, V5 and AutoCAD

A point cloud of an exhaust manifold displayed in Rapidform XOR



Training

New User Training

World class training options are at your fingertips. Join one of our regularly scheduled training courses at a Rapidform office, or have a Rapidform expert come to your facility and train your whole team.

Ongoing Learning

Join us at Rapidform Success, our annual training conference designed to keep you at the forefront of 3D scanning technology. Keep up with the latest tech tips at support.rapidform.com

Updates & Support

New Version Releases

New version releases include major new functionalities as well as enhancements to existing functionality. These new functions are must-haves if you want to stay competitive with the latest tools and technologies.

Find the latest release information at www.rapidform.com/new

Service Packs and Hotfixes

Every day, new challenges are on the horizon. We are constantly improving Rapidform software to ensure you can overcome any challenge you face

Get product updates at www.rapidform.com/product-updates

Technical Support Services

Stay productive and efficient with Rapidform technical support services.

With cutting-edge tools like live web meetings and technical blogs, we devote unparalleled time and effort to your needs.

Keep up with the latest technical support at support.rapidform.com

Product Enhancement Privileges

Sometimes our best new features are from you. You can submit suggestions and feature requests that help optimize your workflow, assuring that you stay efficient by making the software work for you.

Submit any requests at support.rapidform.com



Rapidform is the only viable choice for parametric solid modeling in support of 3D shape engineering and design parameterization.

Rapidform offers CAD-like capabilities for creating solid features, feature tree for allowing roll back for feature editing, and excellent sketching functions.

In addition, the LiveTransfer™ module offers model exporting to mainstream CAD systems almost seamlessly.

Kuang-Hua Chang, Ph. D.
University of Oklahoma



U.S. Air Force funded study available at www.rapidform.com/re-study