



# TOOLKIT3D



**ENABLING MASS PERSONALIZATION**

## Custom Fit Impossible to scale...

- Constant compromise on design intricacy
- Requires teams of skilled CAD experts
- Takes hours to complete one product

**...until now.**



# **A Scan-to-Fit Design Engine delivering personalized products that scale.**

## **INPUT**

**Any scan, any body part.**

Toolkit3D's Scan-to-Fit Design Engine is scanner agnostic and able to ingest raw scan data from any 3D scanning solution.

Scan the body part directly, or turn existing physical molds, like foam boxes, digital.



## PROCESS

### **Proprietary modeling algorithms**

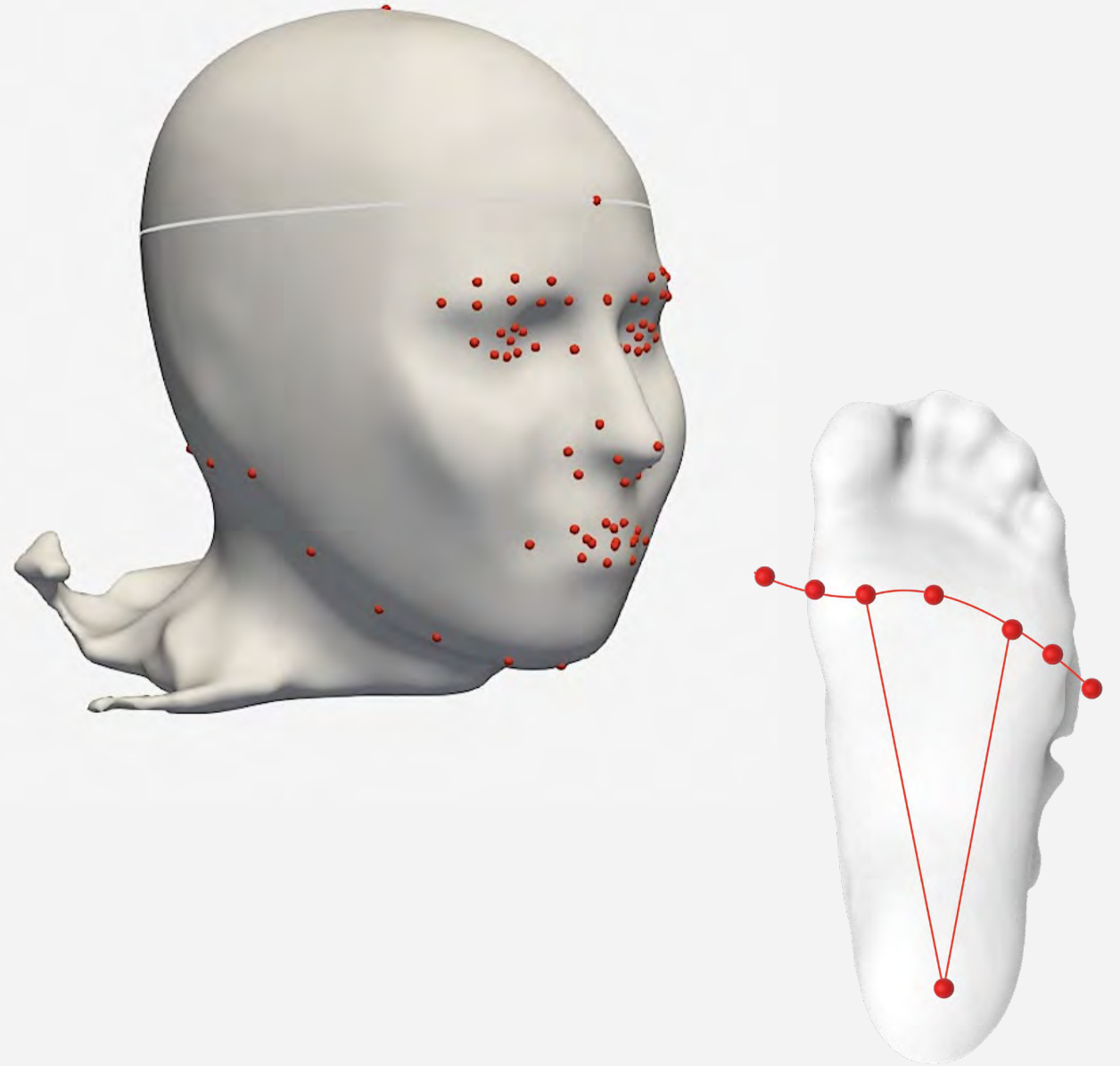
combine with Artificial Intelligence to deliver a truly-custom fitting solution.

**Landmarking**, with hundreds of anatomical and non anatomical markers.

**Reconstruction**, with automatic repairs, cleaning, and rectification (ex. removing hair or shoulders).

**Part Positioning**, placing the parts automatically or manually, based on the anatomical features.

**Part Fitting**, individualized fit from a prescription or standard formula for comfort and function.



## WORKFLOWS

Custom fit products without a "traditional" custom fit process - **enabling mass customization** without sacrificing design or compliance.



## FULL AUTO

Entirely self-fitting workflow, from scan to output.

## SEMI-AUTO

Keep some steps manual, like part fitting or quality checks.

## MANUAL

Enable clinical interventions for individual patients and specify unique landmarks, or adjust part positioning

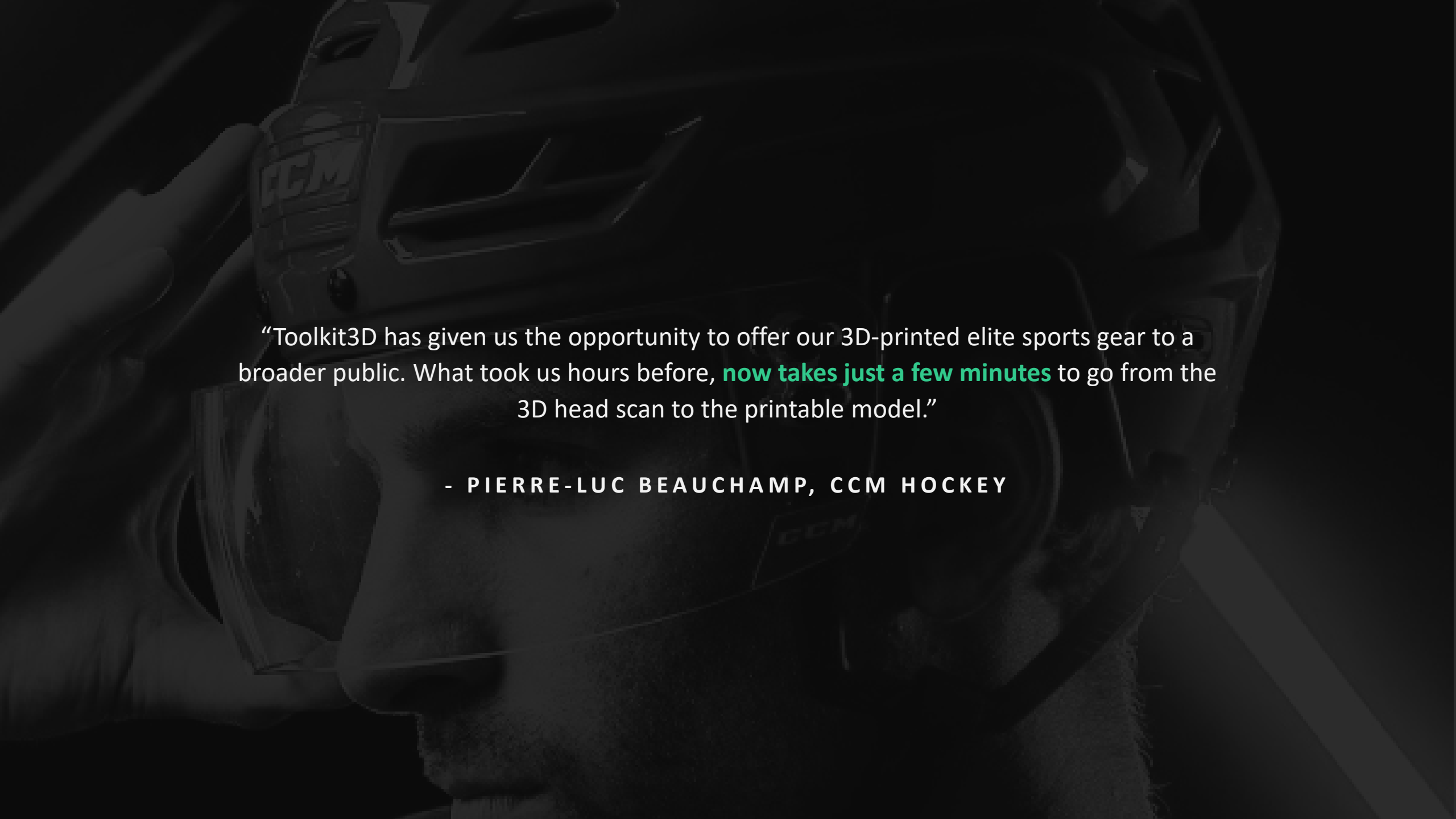
## OUTPUT

Commercial products, **not just prototypes**, for standard or personalized parts.

- **3D Print Ready Parts**, that respect aesthetic preferences, design and clinical restraints or requirements, and manufacturing processes (powder printing vs resin).
- **Part Volumes**, that can integrate directly with latticing engines for the final structure and design.
- **Machine Ready Parts**, compatible with CNC machines, or 2D patterns for cutting.







“Toolkit3D has given us the opportunity to offer our 3D-printed elite sports gear to a broader public. What took us hours before, **now takes just a few minutes** to go from the 3D head scan to the printable model.”

- PIERRE-LUC BEAUCHAMP, CCM HOCKEY