C3 Technologies’ 3D city models are better than Google’s, thanks to imaging technology originally designed for guiding missiles.

Did a spinoff company from a Swedish defense contractor just
out-Google Google? C3 Technologies (which Fast Company covered here) makes jaw-droppingly detailed 3-D models of entire cities using computer-vision technology originally developed by Saab (not to be confused with the car manufacturer) to help guide missiles to their targets. That can't-miss accuracy translates to a truly mindboggling level of detail in these maps: They're accurate down to just six inches. Suck on that, Street View.

As Technology Review explains, most photo-realistic 3-D maps are generated using expensive LIDAR scanning, or -- in Google's case -- a wiki-esque approach where volunteers build and "skin" the models by hand using SketchUp. C3's method is less pricey and 98% automated. First, their DSLR-equipped planes fly over cities in multiple passes, capturing an overlapping set of images; then C3's
computer-vision algorithms take over, using the differences in perspective between the images to build in stereoscopic depth (just like our brains do from the slightly different images it receives from each eye).

"The image processing software generates polygon structures and then the photos are draped over them to create the realistic look," C3 spokesman Greg Spector told Co.Design. "This process is almost totally automated, so we can generate these maps quickly and cost efficiently." And how: Nokia just went public with a C3-powered mapping app.

C3 has created models for twenty major cities so far. After looking at this slideshow, you may feel like you’ve actually visited them.

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It's amazing!
FROM THE EDITOR

Thanks for stopping by Fast Company's Co.Design. Here, we try to bridge the fuzzy border between design and business. We started this site with a few simple premises in mind. First, design is a window onto the world at large, and the culture we live in. When a designer sets down to make something new, she can't help but have some idea about how some object could be so much better than ever before...read more »