

#### Dr. Ing. Frans de Beer dentist MFP

64 years old

I have a technical and a dental education
I work in a general dentistry practice in Maastricht
and
at the Dept. Cranio-Maxillofacial surgery at



In both my work environments I work with computer controlled 3D manufacturing

In the 60th this was my way to spend a lot of time: making





It taught me to live my dreams



1981

revolution

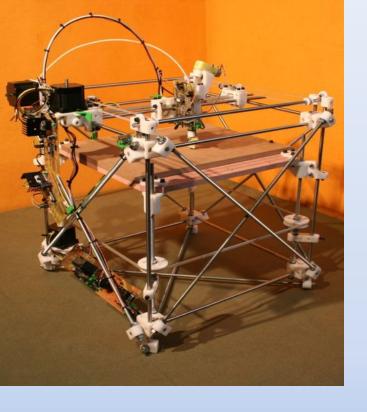


### **IBM PC 5150**

2 floppy drives RAM 16 to 64 Kb ROM 64 Kb 40-80 characters X 40 lines

# Digital Equipment Corporation

founded in 1957 near Boston by 2 ex-MIT students.



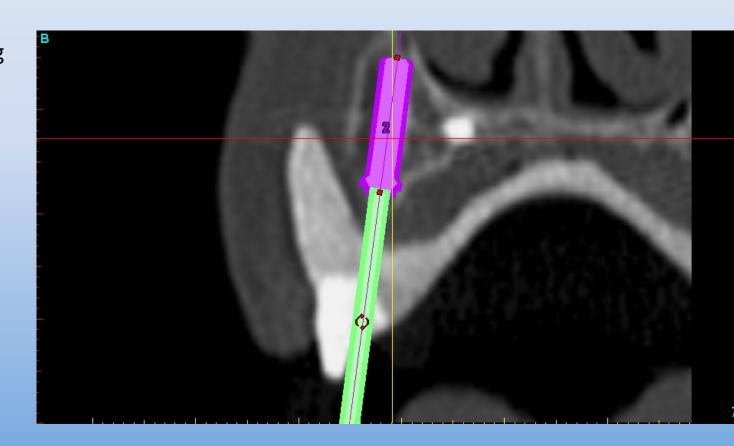
2005



In **2005** Adian Bowyer started the RepRap project at the Bath University

5- axis milling machine

Virtual Planning

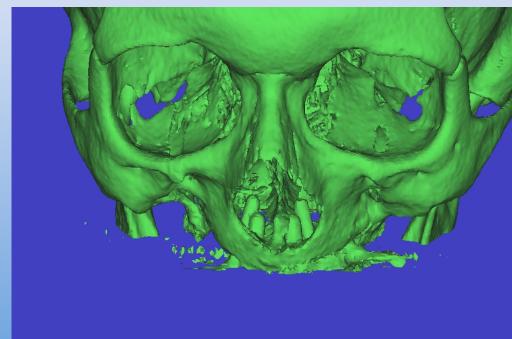


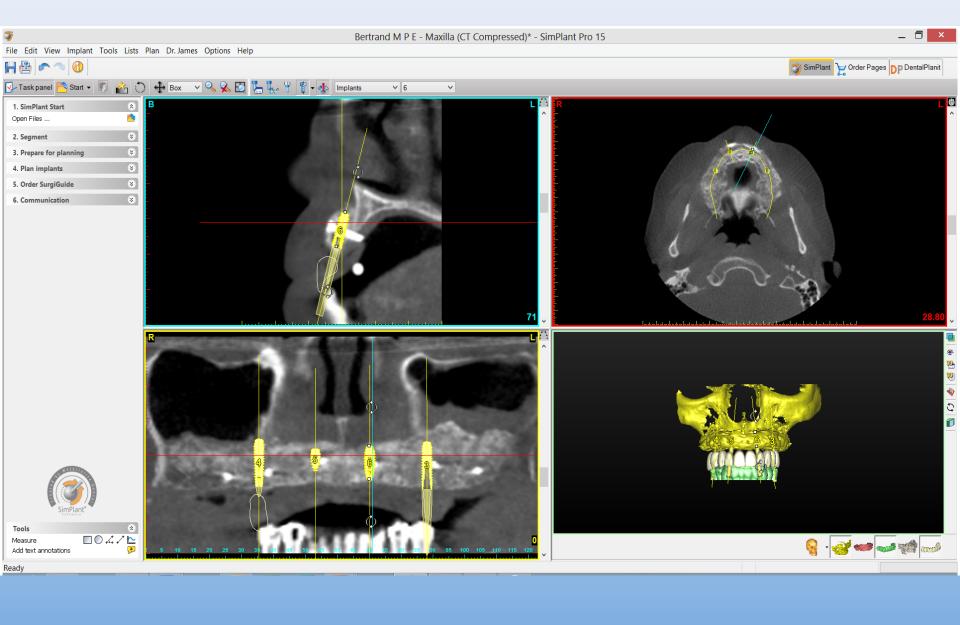
Materialise NV



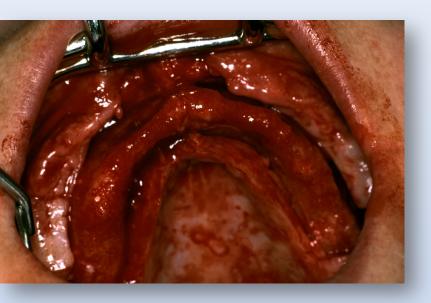
If you fail to plan,

You fail to plan

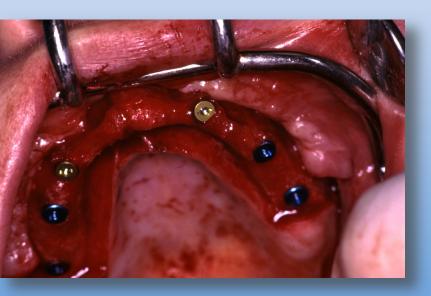


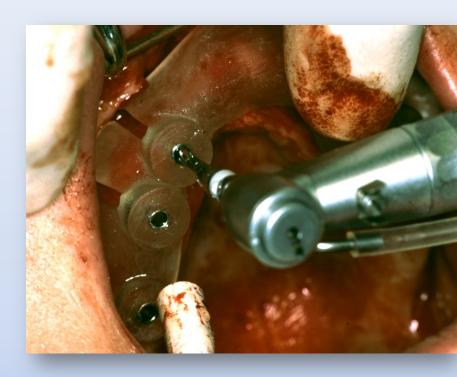


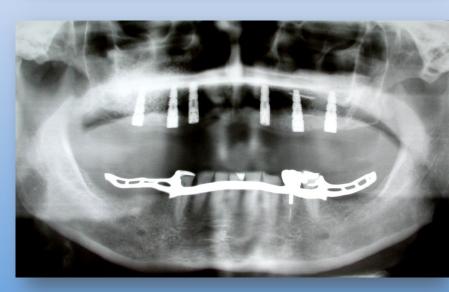




Implant placement with drill guide

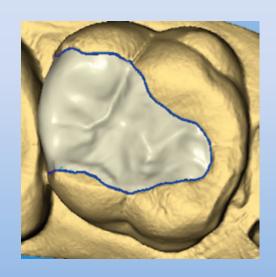






# CEREC 3D crowns, fillings





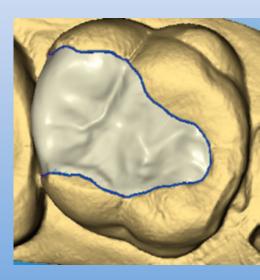




### CEREC 3D







### Dept. Cranio-Maxillofacial surgery

future assignment: 3D printing

- Virtual implant planning
- Virtual cutting guide planning
- Virtual skull cover plate planning
- Ect.....
- 3D printing of bone parts and surgical guides

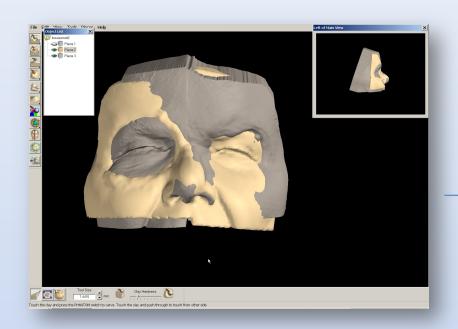


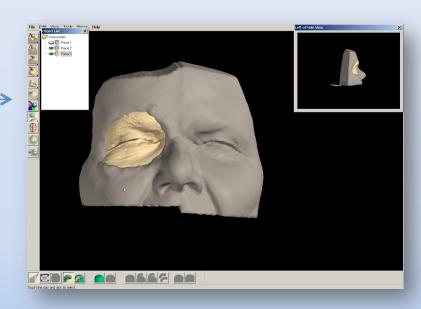
- commercial software
- freeware

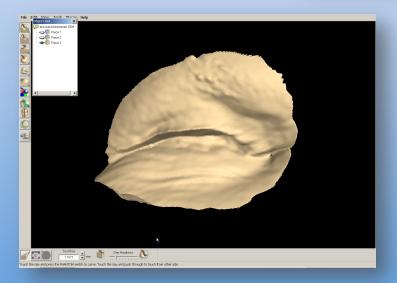


## Eye Casus





























ABS printed part fixed on PMMA Prosthises



Eats flies.
Dates a pig.
Hollywood
star.

# LIVE YOUR DREAMS

Pass It On.

THE FOUNDATION FOR A BETTER LIFE

www.forbetterlife.org