

"...Supplier of force feedback computer peripherals and software solutions..."



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- Spin-off of CEA (French Nuclear Agency)
- Founded in 2001
- Number of People : 17
- Location : laval
- Offices: Germany, Canada
- Reseller: Japan, China, UK, South-America
- CAA Adapter : Partnership with Dassault



Applications of 6-dof force-feedback

- Engineering



- Medical



- Other





Engineering

 Applications: Validation for Assembly, Disassembly, Ergonomic study, or maintenance method





Medical

Train, complement, supervise motor skills...

Training simulator for dental surgery:
 DigiMed

•Rehabilitation: Kinehaptic for upper limbs

•Surgical assistance : Surgicobot

Tele-surgery with force-feedback: <u>LRP</u>





Other: nuclear industry

Cogema: Dismantling of old nuclear facilities

Benefits of force-feedback:

Force control during operation.

Enhanced perception.

Monitoring of forces.

Full traceability.









Products & Solutions

Hardware products:



Virtuose 6D40-40
Tele-operation



Virtuose 6D35-40 CAD/Virtual Reality



Virtuose 6DDesktop CAD/Medical



INCA 3D & 6D Virtual Reality

Software solutions:Catia V5 / Virtools / SolidWorks



Haption in the industry today: a reality!

Automotive

- PSA Peugeot Citroën
- Renault
- Volkswagen (D)
- Toyota (JP)
- Aircraft
 - EADS/Airbus
 - Dassault Aviation
 - Lockheed Martin (US)



















Academic references

Academic:

- CEA
- CNRS
- INRIA
- INRS
- FNIT
- LAPS
- LIMSI
- LRP
- Evry University
- LMT
- IRCCYN
- Erlangen Univ (Germany)
- Beihang University (China)
- Ecole Polytechnic Milan (IT)























Thanks for your attention

• Questions ?