



YouWol

www.youwol.com

Platform

&

YouWol Geoscience

<https://www.geoscience.youwol.com>

Geomechanical Tools





ABOUT

YouWol is the brain child of Dr. Frantz Maerten and Dr. Laurent Maerten. They sought to create a development environment for scientists that helps building innovative computational applications at a minimum cost, with full to no programming knowledge. By bringing together the latest advances in web technology and graphics, the YouWol Platform was created, a web-based integrated platform for everyone!

- Montpellier-based startup founded in 2020
- Activities:
 - ✓ Development: R&D collaborative web-based platform for all engineers and scientists
 - ✓ Services: Geoscience tools and expertise for geothermal energy, CO₂ and nuclear waste storage and oil & gas
- Contact: Dr. Laurent Maerten (lmaerten@youwol.com)
- We take pride in our numbers!



*YouWol's founders, Dr. Frantz Maerten and Dr. Laurent Maerten, graduated from **Montpellier University** (France) and **Stanford University** (USA). They have previously founded the **IGEOSS** company and have worked for **Schlumberger** for 9 years.*

Frantz and Laurent Maerten (Normandie, France, 1977)

Patents

11

Years of experience

26

Scientific publications

32

Industry reports

39

Conferences

54



YouWol

PLATFORM

YouWol Platform is a browser-based open-source laboratory for collaborating, building and sharing prototypes and technical applications in both science and engineering.

■ Our Vision

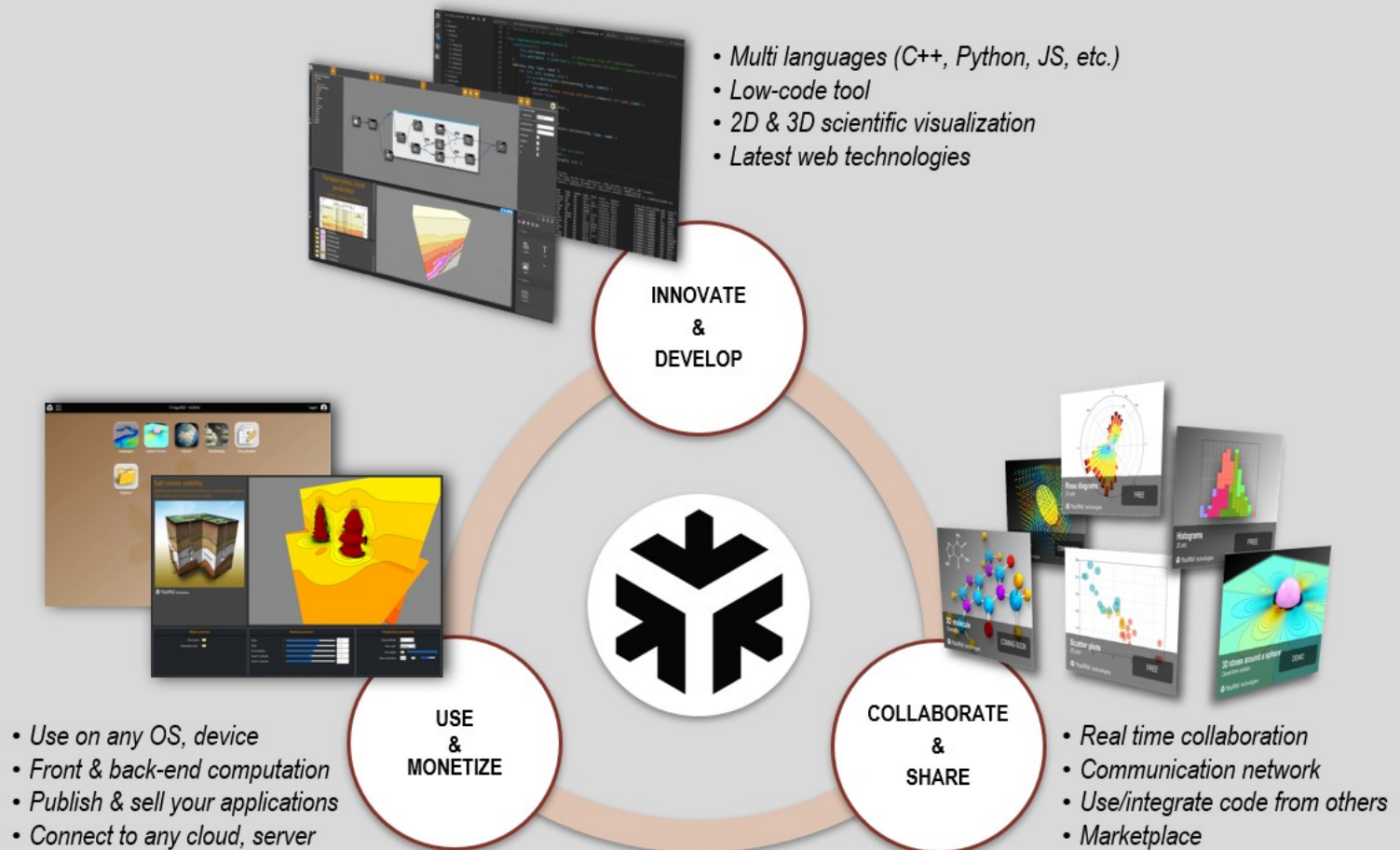
Helping computational research, development and innovation in Science and Engineering at the highest level, to facilitate collaboration and increase efficiency, visibility and commercial success.

■ Our Mission

Providing a cutting-edge web-based platform and network to create and maximize the use of resources, to encourage collaborative science and innovative computational technologies.

■ YouWol Platform main fundamental concepts

- ✓ Open source platform
- ✓ Full programming to low-code
- ✓ Language agnostic
- ✓ Uses state-of-the-art web technologies
- ✓ Browser-based work space
- ✓ Collaborative & evolutive
- ✓ Build your web applications
- ✓ Share & monetize in the marketplace



YouWol Geoscience

GEOMECHANICAL TOOLS

YouWol Geoscience provides geomechanical tools and associated services to help solving issues in the field of Geothermal Energy, CO₂ & Nuclear Waste Storage and Oil & Gas.

R&D and Innovation

YouWol Geoscience is at the forefront of innovation developing geomechanical numerical tools and associated geoscience applications integrated in the YouWol Platform.

Geoscience Expertise

YouWol Geoscience provides services in the field of structural geology, geomechanics with a strong emphasis on fault & fracture analysis, modeling and reactivation.

YouWol Geoscience main technology & applications



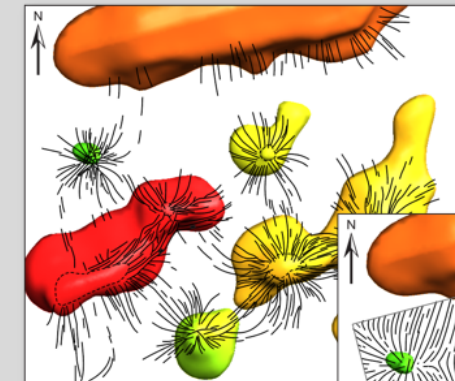
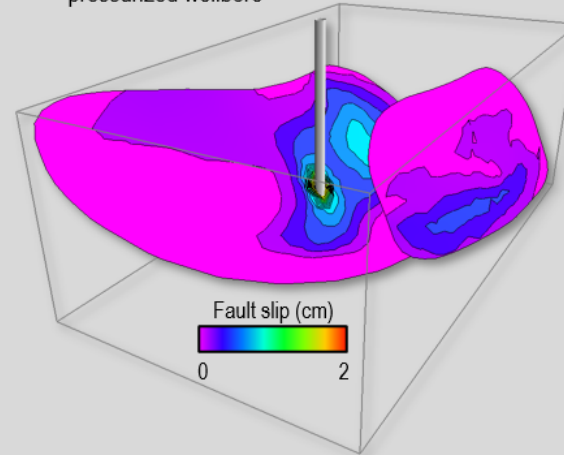
ARCH

2D/3D Displacement
Discontinuity Method

Models deformation and stress around faults, fractures, salt bodies, cavities and wellbore and other mechanically active objects.

Geothermal energy

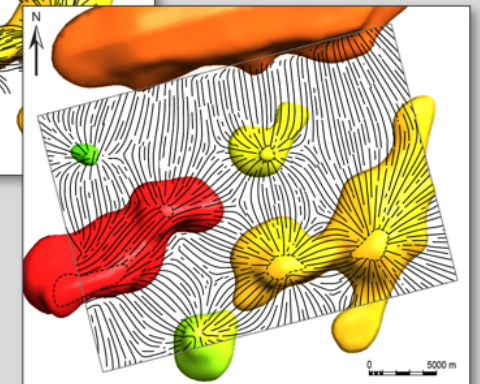
Modeled fault reactivation induced by pressurized wellbore



observed fault traces

Oil & Gas

Modeled stresses and natural fractures around salt diapirs



fault orientation from modeled stresses

CO₂ storage

Modeled ground subsidence caused by salt cavern network

