SIBYLLE FAVREAU

Mechanical engineer

CONTACT

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19th January 2002

Driving licence

My portfolio website:
https://sibyllefavreau.github.io/portfolio/

SKILLS

Finite element software:
Ansys, Abaqus, COMSOL, RDM7

Programming in Java, Matlab, Python, WEB (html, css, js)

CAD: Solid Edge, 3Dexperience, Adams View

CERTIFICATES – DISTINCTIONS

CFE: Certificate of completion of studies in music theory obtained in 2016 from Nantes Regional Conservatory.

CEM: Certificate of completion of studies in music saxophone obtained in 2019 from Nantes Regional Conservatory

Winner of the 2019 Young Ambassador Group Competition – Nantes Academy

LANGUAGE SKILLS

French: native
English: B2 (Cambridge certification)
Spanish: B2
Swedish: A1

HOBBIES

Music (saxophone)
Baking
Running
Painting
Hiking
Tennis

EDUCATIONAL BACKGROUND

INSA Lyon (National Institute of Applied Sciences)

2019-2024 – Mechanical engineering degree
Solid mechanics - Finite element method - Numerical modelling - CAD and modelling – Design and Sizing - Dynamics and analysis of mechanical systems - Mechanical transmission - Fluid mechanics - Heat transfer - Acoustics and vibration

KTH (Royal Institute of Technology), Stockholm, Sweden

2023/2024 – University exchange semester
Research and development project, biomechanics, machine dynamics

Scientific Baccalaureate specializing in mathematics

2019 - Lycée Nelson Mandela, Nantes
Graduated with honours (18,95/20).

PROFESSIONAL EXPERIENCE

Decathlon R&D – End-of-studies internship

2021-2022
Numerical study of shoe sole abrasion
Design of a tool for numerical prediction of shoe abrasion for different sports (Abaqus, Python, Matlab, SpaceClaim)
Taking biomechanical measurements (Qualysis, force platform, Pedar)

INSA Lyon – Mathematics mentoring

2021-2022
Course synthesis – listening skills – transmission of knowledge.

Summer job

2021 – MaxiAide – Home help (1 month)
2020 – Carrefour Market - Department employee (1 month)

PERSONNAL PROJECTS

2023: Realization of a personal **portfolio** (design and development in html, css and typescript), using the Angular framework.

2023: Group project in collaboration with the French company Rheonova – Development of a system for **evaluating and controlling** the positioning of a sample on a rheometer, prototyping, bubble detector (python), **numerical simulation** of fluid deposition (Ansys Fluent) (6 months)

2022 – 2023: Group project in collaboration with the company Safran Landing Systems – **Design** of a **measurement system** characterizing the wear of an aeronautical brake disc, sizing, CAD modeling (3D experience), project management (6 months)

2022: **Modeling** a golf ball trajectory on Matlab (5 months)

2021: Mechanical analysis and **CAD modeling** of a gyroscopic stabilizer with Adams View (3 months)

2021: Analysis and **modeling** of the volleyball attack movement, Motion capture (OptiTrack), computer algebra system (Maple), resolution of **differential equations** (Matlab) and CAD (Adams View), (4 months)