

Christian Hiricoiu

Mechanical Aircraft Engineer

French – mother tongue
English – fluent (TOEIC : 965)
Deutsch – A2
Español – A2

Looking for opportunities in scientific programming

Education

- 2018–2020 **Master Maschinenbau**, Hochschule Mannheim – Germany.
advanced Matlab programming, fluid mechanics (theory & CFD), material science, ...
- 2016–2019 **Mechanical Engineer Degree**, Ecole Nationale Supérieure des Arts & Métiers.
solid & fluid mechanics, FEA & CFD, material science, manufacturing processes, industrialization, ...
- 2014–2016 **Technical University Degree - Mechanical Engineering**, IUT Poitiers.

Experiences

- since Oct 2019 **Aircraft Engineer**, Design Tech Centre, Saint-Cloud – France.
- design & calculation of an aerobatic airplane made of composite materials (P-51 Mustang) :
 - designing & drafting CAD parts
 - flight mechanics & aircraft balancing
 - dimensioning of cooling system reducing drag effect (radiator & oil circuit)
 - dimensioning of flight controls
 - structural analysis of the overall structure
 - FEA with composite materials methods & tools (workflow & scripting process)
 - programming various tools/scripts for the team/project
 - several independent FEA assignments : composite & isotropic materials
 - canvassing for subcontractors & purchasing customized parts
- Feb – Sep 2019 **Internship**, AIRBUS Helicopters, Marignane – France, 6 months.
- gearboxes transmission & toothing gears optimization :
 - programming of a toolbox/software for the gears development
 - pre-dimensioning of cylindrical and spiro-conical gears
- 2018 – 2019 **Freelance - 3D Designer**, Auto-entrepreneur, 11 months.
- CAD designing : skateboard, drift trike Frame, tablefootball, etc...
 - major contract (4 months): design of a laser cutting machine, establishing & delivering the specs
 - drafting of technical specifications from scratch
 - pre-dimensioning of the main parts

Skills

CAD : CatiaV5 & Autodesk Inventor	Programming : Python3 (scripts/web-scrapper/OOP)
FEA & CFD : ANSYS, StarCCM+	C++ (data analysis/post-processor/OOP)
Productivity : L ^A T _E X, Office365, LibreOffice	Matlab, Qt/PyQt lib, git/github

Projects

Metrics (2017–2018) research project on the compensation of geometrical defects of a 5-axis machining unit

Hobbies

Sports : athletics (12 years of intensive practice), rugby - amateur level (5 years), climbing, hiking

PC & Tech : hardware/software, linux, raspberry pi, automation, algorithmics (Project Euler)

Chess : regular basis player, rating ~1550 on lichess.org