CHRISTOPHE FOYER

Christophe@cfoyer.com • Linkedin.cfoyer.com • Github.cfoyer.com | US: (+1) 816-419-6150 • UK: (+44) 7444 175493 US and French citizenships | Eligible to work without restriction in the USA, UK, and EEA, and remotely

EDUCATION

University College London

London, United Kingdom

2019 - 2020

Master of Science - Scientific Computing - Distinction

Saint Louis, USA

Washington University in Saint Louis

2014 - 2017

Bachelor of Science - Mechanical Engineering | Minor in Energy Engineering

Study Abroad: - RWTH Aachen, Germany (Summer 2017) - Energy & Mechatronics

- School for International Training, Iceland (Summer 2015) - Energy

EXPERIENCE

MAUI 63 Remote, New Zealand Software Volunteer 2021 - Present

Developed OpenCV code for use with Darknet Yolov4 Deep Neural Networks, data post-processing

Temporary Works Design

London, United Kingdom

Design Engineer 2018 - 2019

- Designed bespoke equipment and structures for offshore installation projects using Autodesk Inventor
- Calculated structural parameters using finite element analysis and manual calculations
- Coded stress calculation scripts in Python for standardization and workflow improvement software projects

Tata Steel Europe Ilmuiden, Netherlands

Engineering Intern - Simulation Software

2018

- Designed and coded a large-scale thermal simulation in Python reducing temperature estimation error by 82.4%
- Released a real-time proof-of-concept now deployed in production following by a KPMG team business case analysis
- Organized a training session on collaborative code management (git) for the department

ACADEMIC PROJECTS

M.Sc. Thesis - B Spline 2D/3D image fitting

University College London

B-Spline Active Contours for the Segmentation of Vascular Structures

2019 - 2020

Produced coded a Python library for 2D and 3D Active contours/surfaces using B Splines/NURBS

B.S. Final Project - Low-Cost Concentrator Photovoltaics

Washington University in St. Louis

Water Lenses for Low-Cost Concentrator Photovoltaics

2017

- Coded optics simulation software and thin membrane 2D FEA scripts in MATLAB for hypothesis verification
- Designed, built, and programmed a single-axis solar tracking apparatus using photosensors and Arduino.

Wash. U. Design/Build/Fly Competition Team

Founder

Washington University in St. Louis

2016 - 2017

- Co-led the team to 12th place out of 138 teams at the AIAA DBF 2017 competition, with over 40 members today
- In charge of the systems sub-team to design and optimize aircraft internal systems through MATLAB simulations

OTHER PROJECTS & INVOLVEMENTS

Agricultural Robotics

Domaine Du Vivier Farm

Personal Project

ROS and SLAM server task offload test platform

2020 - Present

Small business Linux system administrator

Le Mesnil Mauger, France 2020 - Present

SKILLS

Programming

Python, MATLAB / Simulink, SQL, C++, Bash, JavaScript

Software

Git, SVN, Linux, ROS, Docker

Prototyping

Microcontrollers, CAD, FEA, CFD, 3D-printing, machining, composites

Languages

Native English and French (Bilingual) • Basic German and Icelandic