

# CHRISTOPHE FOYER

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US and French citizenships | Eligible to work without restriction in the USA, UK, and EEA

## EDUCATION

### University College London

Master of Science - Scientific Computing - Distinction

London, United Kingdom

Sep 2019 – Sep 2020

### Washington University in Saint Louis

Bachelor of Science - Mechanical Engineering | Minor in Energy Engineering

Saint Louis, USA

Aug 2014 – Dec 2017

**Study Abroad:** - RWTH Aachen, Germany (Summer 2017) – Energy & Mechatronics  
- School for International Training, Iceland (Summer 2015) – Energy

## EXPERIENCE

### Temporary Works Design

Design Engineer

London, United Kingdom

Nov 2018 – July 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

Engineering Intern – Simulation Software

IJmuiden, Netherlands

Apr 2018 – July 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

B-Spline Active Contours for the Segmentation of Vascular Structures

University College London

Oct 2019 – Sep 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

Water Lenses for Low-Cost Concentrator Photovoltaics

Washington University in St. Louis

Aug 2017 – Dec 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

Mar 2016 – Dec 2017

- Co-led the team to 12<sup>th</sup> 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

ROS and SLAM server task offload test platform

Personal Project – France

Dec 2020 - Present

### Domaine Du Vivier

Small business Linux system administrator

Le Mesnil Mauger, France

Mar 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