# **Christophe Foyer**

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## **Education:**

#### Washington University in Saint Louis, United States

Aug 2014 – Dec 2017

Bachelor of Science

3.14/4.00 GPA

Major in Mechanical Engineering, Minor in Energy Engineering

• Dean's List (Fall 2014, Fall 2017)

Study abroad: SIT Iceland - 'Renewable Energy Engineering and Resource Economics'

#### **RWTH Aachen, Germany**

Jun 2017 - Jul 2017

Certificates in 'Renewable Energy Technology' and 'Mechatronics and Product Innovation'

• Completion with 2.3 (very good) and 1.3 (excellent) respective grades; Best-in-Class award

## **Relevant Coursework:**

Engineering Mechanics (I, II, III) Material Science Thermodynamics Sensors and Actuators
Dynamics and Vibrations Fluid Mechanics Heat Transfer Computer Aided Design

# **Experience:**

## Design/Build/Fly at Washington University in St. Louis

Mar 2016 – Dec 2017

Co-Founder and Systems Team Lead Treasurer Mar 2016 – Dec 2017 Aug 2016 – May 2017

- Co-led the team to 12<sup>th</sup> place out of 138 teams at the AIAA DBF 2017 competition, and 1<sup>st</sup> in the Midwest
- Designed aircraft internal system including battery and motor selection with the systems team
- Managed an operating budget of \$10,000 to buy supplies and organize travel to the competition
- Scheduled weekly meetings with the team and set project deadlines

## **American Society of Mechanical Engineers at Washington University**

Jan 2016 – Dec 2017

Event Planner

Sep 2016 – May 2017

Researched potential STEM-related speakers to fit within budget constraint, presented reasons to fund Michio Kaku's visit to campus, and secured a date for his visit

## Domaine du Vivier, Le Mesnil Mauger, France

Jun 2015 – Aug 2017

Seasonal farm hand

(Multiple dates)

• Maintenance and operation of farming equipment and various agricultural work during the summer

#### **Volunteering:**

## ICC, Ishinomaki, Japan

May 2014

Volunteer

• Construction of two wooden terraces for the local community in a region devastated by the 2011 tsunami.

#### **Projects:** (cfoyer.com/#projects)

# Senior Design Project - Low-Cost CPV

Aug 2017 – Dec 2017

Foyer, Christophe; Rangwala, Adam; and Nana, Deep, "Water Lenses for Low-Cost Concentrator Photovoltaics" (2017). Mechanical Engineering Design Project Class. (<a href="https://openscholarship.wustl.edu/mems411/71/">https://openscholarship.wustl.edu/mems411/71/</a>)

- Coding of FEA and ray tracing software for optics simulation in MATLAB
- Development of a sunlight tracking circuit and coding using Arduino
- Creation of a working proof of concept prototype increasing solar cell output by 860%.

#### **Skills and Abilities:**

CAD / FEA / CFD: SolidWorks, Autodesk Inventor, XFLR5

Programming Languages: Matlab, Simulink, Python, Arduino C (C/C++), HTML

Fabrication: 3D-Printing, Machining (Lathe, Mill), Composite Manufacturing

Software: Microsoft Office Suite, Windows, Linux

Languages: Bilingual French / English • Basic German and Icelandic