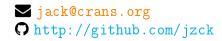


# Jack Halford





#### **EDUCATION**

# 42 programming school

09/2016-present



- C, UnixShell scripting

# ENS Cachan - Physics (3 years university degree)

09/2015 - 06/2016



- Quantum mechanics
- Special relativity
- Statistical physics
- Computational physics (fortran 95)
- Optics, lasers, electromagnetism
- Complex analysis

# 2 year preparatory course (PTSI - PT) Lycée Turgot Limoges

09/2013 - 06/2015



- Mechanical engineering basics
- Automatic control theory, Signal processing
- Classical physics
- Mathematics (real analysis, linear algebra, probability theory)

### Work experience

#### IMPMC (Institut des minéralogie, de physique des matériaux et de cosmochimie) -**Paris** 05/2016-06/2016



- 5 week intership in a solid state physics lab
- Tight-binding modeling of rhombohedral graphene.
- Use of fortran lapack library to produce high performance code.
- Improving the understanding of the conduction properties of graphene in exotic conditions

#### Projects

# **OpenBikes**

OpenBikes is application for visualizing in real time the number of bikes/spaces in bike stations. The visualization is done with LeafletJS and a lot of JavaScript. The data is scraped (Python), stored (MongoDB) and analyzed (sklearn) in order to make forecast and advise users/cities. The website is live at http://openbikes.co/.

Programming Capable in C, Fortran

Adaptability Highly capable and motivated to learn new technologies

Languages Fluent in English and French

## DISTINCTIONS

Winner of Data Connexions, a national open data competition

2016

Regional mathematics prize winner at middleschool and highschool

2009, 2011, 2012

Intérêts

— Bowling	— Cuisine
— Cyclotourisme	— Lecture
— Aquaponie	— Cinéma

- Programmation— Logiciel libre
- Logiciei fibreElectronique