Jack Halford

jack@crans.org
http://github.com/jzck

Education

42 programming school - Paris *08/2016–present*

- C (`C99` standard)
- Unix and POSIX standards
- using `git` as a team
- Shell scripting
- Rewrite of the `libc` library

ENS Cachan - B.Sc. in Physics *09/2015–06/2016*

- Quantum mechanics
- Special relativity
- Statistical physics
- Computational physics (`fortran`)
- Optics, lasers, electromagnetism
- Mathematics : 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 [1] - 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 calculations.
- Improving the understanding of the conduction properties of graphene in exotic conditions

Projects

Shell Leading a team of 5 students to develop a fully fledged shell built in C, including shell scripting, job control. Next to development, I am responsible for management of the team.

Coilgun Built a coilgun as an undergaduate project, alongside a complete simulation with `Matlab Simulink` to adjust paramaters for maximum efficiency. Final version shot 50g steel bullets at 120km/h.

Skills

Very good C, fortran

Good git, LaTeX [2]

Intermediate Python, Arduino

Used daily vim, git, tmux, Makefile

Prior exposure Matlab, Django, PIC32

Systems OS X, Linux

1. Institut de minéralogie, de physique des matériaux et de cosmochimie
2. see CV. *beware* : recursion