

Bastien Mussard

Software Engineer

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mussard.github.io

Resume produced on June 22, 2019 (Bold elements are clickable)

Scientist by training, looking for a job leaning more toward programmation, which has effectively always been at the core of my work.

- Used to work on cross-functional projects.
- Good <u>dialog</u> with people of broad backgrounds.
- Participation in teams to launch new features, from creation to production phase.
- Communication on results and processes, including through visual aids.

Global thinking

Creativity

Curiosity

Adaptability

Tenacity

Motivation



EXPERIENCES

Postdoctorate

2017-2019

University of Colorado, Boulder, USA <u>Contact</u>: Sandeep Sharma

Handling of large operation and data flows. Design and creation of scalable algorithms. Lead a team of 4 PhD candidates. Set up good pratices guidelines and CI.

Invited researcher

2016

University of Cornell, Ithaca, USA Contact: Cyrus Umrigar

Unified implementations to boost performance. Wrote user/programmer docs for complex codes.

Research Engineer

2014-2016

Sorbonne University, Paris Contact: Julien Toulouse

Tasked with production and maintenance of codes. Optimized core routines in widely used algorithms. Developed user-friendly librairies for key tasks. Design and creation of naturally interfacing codes.



SKILLS

Linux, Bash				
Python				
С		0	0	0
Git, SVN				0
CI, Testing		0	0	0
Machine Learning		0	0	0

Bilingual <u>French</u> (native) and <u>English</u> (daily pratical use both personnally and professionally; lived 3 years in the United States).



PRODUCTION

15 publications and significant contributions to major scientific codes:

- **Molpro**: a comprehensive system of commercial programs for advanced calculations.
- **Dice**: a modern code that takes advantage of the latest advances in the domain.
- **PySCF**: a theoretical chemistry program easy to use, coded in Python and C.
- **CHAMP**: a code that uses stochastic processes.



EDUCATION

PhD Université de Lorraine, Nancy	2010-2013
MSc École Normale Supérieure, Paris	2007-2010

Higher School Prep. Classes 2005-2007



INTERESTS

Teaching, Outreach, Swimming, Reading, Hiking