



Bastien Mussard

Software Engineer

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in in/bastien-mussard

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(*Bold elements clickable*)

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

- Acustomed to work on cross-functional projects.
- Good dialog with people of broad backgrounds.
- Team work to launch new features, from creation to production phase.
- Communication on results and processes, including through visual aids.

Creativity

Global thinking

Curiosity

Adaptability

Tenacity

Team-player



SKILLS

Linux, Bash



Python



C



Git, SVN



CI, Testing



Machine Learning



Bilingual French (native) and English (daily practical use both personally and professionally ; lived 3 years in the United States).



EXPERIENCES

Postdoctorate

2017-2019

University of Colorado, Boulder, USA

Contact: 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 practices 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 libraries for key tasks.

Design and creation of naturally interfacing codes.



PRODUCTION

15 scientific 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

2010-2013

Université de Lorraine, Nancy

MSc

2007-2010

École Normale Supérieure, Paris

Higher School Prep. Classes

2005-2007



INTERESTS

Teaching, Outreach, Swimming, Reading, Hiking