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

🧰 EXPERIENCES

Postdoctorate — 2017-2019
University of Colorado, Boulder, USA
Contact: Sandeep Sharma

Lead a team of 4 PhD candidates.
Handling of large operation and data flows.
Design and creation of scalable algorithms.
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/developer 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.

🔧 SKILLS

Skill	Level
Linux, Bash	●●●●●●
Python	●●●●●●
C	●●●○○○
Git, SVN	●●●●●○
CI, Testing	●●●○○○
Machine Learning	●●●○○○

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

🗄 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