Jérôme BENOIT
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Computing and Information Technology Experience

2016/09–16/12	Debian specialist developer at Logilab;
2015/04–16/03	Debian specialist developer at IMAGINARY.org;
2012/02–	Debian package contributor;
2008/10–09/07	small cluster installation and maintenance (Debian) at National Central University;
1999/09–	Debian user;
1990/09–	alongside, writes scientific code or hacks anything that compiles (or not).

Research Experience

2017/01–20/07	research associate at New-York University Abu Dhabi (Abu Dhabi, UAE);
2011/09–	independent researcher;
2011/09–14/06	invited to Laboratory of Mathematics at Besançon (Besançon, France);
2009/08–11/01	research fellow at Nanyang Technological University (Singapore, Singapore);
2006/09–09/07	postdoctoral associate at National Central University (Jhongli, Taiwan);
2004/10–06/07	postdoctoral associate at University of Lisbon (Lisbon, Portugal);
2002/04–04/02	postdoctoral associate at National Hellenic Research Foundation (Heraklion, Greece);
2001/04–02/03	postdoc at University of Jena (Jena, Germany);
2000/01–00/09	invited to Los Alamos National Laboratory (Los Alamos, USA).

Supervision Experience

2010–11	informal doctoral student guidance (Singapore, Singapore): Li Na ZHAO;
2001–02	informal doctoral student guidance (Jena, Germany): Elizabeth VON HAUFF.

Doctoral Education

1995–99	*Doctorate* in Theoretical Physics at University of Cergy-Pontoise with high honors [doctoral advisor: Rossen DANDOLOFF] (Cergy-Pontoise, France);
1993–94	*Master (DEA — late French Advanced Studies Degree) in Theoretical Physics* with honors [Fundamental Concepts in Physics (CFP)] at Paris-Sud (Orsay, France).

Predoctoral Education

1991–94	*Orsay Fundamental Physics Magistère* with honors at Paris-Sud (Orsay, France);
1992–93	*Imperial College International Diploma* in Physics (London, United Kingdom).

Undergrad Education

1988–90	*Preparatory School Classes (Classe Préparatoire aux Grandes Ecoles)* — Maths Spéc P' [pure Mathematics and advanced higher Physics] — at Lycée Carnot (Dijon, France);
1987–88	*Preparatory School Classes* — Maths Sup prepa X=Polytechnique [pure Mathematics and higher Physics] — at Prytanée National Militaire de La Flèche (La Flèche, France).

Professional Networking

- `https://zenodo.org/communities/jgmbenoit`
- `https://www.researchgate.net/profile/Jerome_BENOIT`
- `https://independent.academia.edu/JeromeBENOIT`
- `https://www.linkedin.com/in/jgmbenoit`

Community Networking

- `https://savannah.gnu.org/users/jgmb`
- `https://qa.debian.org/developer.php?login=calculus@rezozer.net`
- `https://gitlab.com/jgmbenoit`
- `https://github.com/jgmbenoit`

Soft Skills

Troubleshooting, Problem solving,
Self-Teaching, Critical thinking, Creative thinking,
Mathematically minded, Analytical thinking,
Thinking out of the box, Community-oriented,
Team player, Cross-cultural understanding.

Hard Skills

Theoretical Physics	nonlinearity, symmetries, field theory, geometric (topological) integrable systems, information physics, geometrical frustration, small-world networks, epidemiology, nonlinear σ-model, sine-Gordon equation, power-laws, . . .
Mathematics	mathematical modelling, numerical analysis, statistics, (nonlinear) analysis, differential geometry, geometrical topology, knot theory, information theory, network theory, Galois lattices, (very) special functions, quaternions, numerical experiences, . . .
Computing	software development (`autotools` machinery, API+ABI+`tests`, *backend*+CLI+ +`modules`), object-oriented programming, scripting, symbolic computing, (human/non-human) code generation, C metaprogramming, . . .
Computer	batch job processing, packaging (Debian), cluster management (Debian), building my own specific Linux kernels, hardware hacking, . . .

Computing Knowledge

Simulation Tools	Surface Evolver
Software Packages	GSL, libXML2, GMP, MPFR, Arb, Maple/OpenMaple, GTS, GRTensorII, . . .
Core Languages	C (*proficient*), Maple (*near-proficient*), C++, D (*acquiring*), . . .
Script Languages	Maple (*near-proficient*), BASH (*fluent*), Python, Perl, DASH, D (*acquiring*), . . .
Markup Languages	TeX/LaTeX, XML
Geometric Languages	METAPOST
Parallel Computation	LAM-MPI, OpenMP (*acquiring*), `pthread` (*acquiring*)
Programming Tools	autotools, make, flex/bison, Maple, CWEB, . . .
Debugging/Profiling Tools	valgrind
Patch Tools	patch, quilt
Version Control Systems	GIT
Job Scheduling Systems	SLURM
Operating Systems	Linux (Debian GNU/Linux)
Document Typesetting	LaTeX 2_ε, TeX, METAPOST, BibTeX, . . .

Responsibilities

Referee	*'Journal of Physics A: Mathematical and Theoretical'*;
Open Source	shared scientific software development as part of the GNU Project; package maintenance, patch submissions, and bug reports for the Debian distribution; direct patch submissions via `email` or *pull requests* via GITHUB/GITLAB to upstream maintainers for fixing bugs or sanitizing build machineries.

Language Proficiency

French	native language;
English	professional working proficiency.

Referees

Rossen DANDOLOFF   (research and teaching referee; doctoral advisor)
<rdandoloff@yahoo.com>
Laboratoire de Physique Théorique et Modélisation
Université de Cergy-Pontoise, Site Saint Martin 2
2, Avenue A. Chauvin
F-95302 Cergy-Pontoise, France

Avadh SAXENA   (research referee; postdoctoral advisor)
<avadh@lanl.gov>
Theoretical Division and Center for Nonlinear Studies
Los Alamos National Laboratory
P. O. Box 1663
Los Alamos, New Mexico 87545, United States of America

Tuong TRUONG   (research referee; informal doctoral mentor)
<tuong.truong@ptm.u-cergy.fr>
Laboratoire de Physique Théorique et Modélisation
Université de Cergy-Pontoise, Site Saint Martin 2
2, Avenue A. Chauvin
F-95302 Cergy-Pontoise, France

Saif Eddin JABARI   (most recent employer; research supervisor)
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New York University Abu Dhabi (NYUAD)
Saadiyat Island - P. O. Box 129188
Abu Dhabi, United Arab Emirates