Vadim Nemytov

6 Anne Greenwood Close, Iffley, Oxford, OX4 4DN, UK, EU citizen, resident in UK **(**+44)79 8282 8643

oxdots vadim.nemytov13@imperial.ac.uk

https://github.com/VadimNV/CV_and_supporting

in www.linkedin.com/in/vadim-nemytov

Education

M.Sc. + Ph.D. Theory and Simulation of Materials	Imperial College London	2013 - 2017
M.Sc. Condensed Matter Theory and Modelling	McGill University, Canada	2011 – 2012
B.Sc. Joint Honoursin Mathematics and Physics3.72/4.0 GPA (UK 1st class)	McGill University, Canada	2007 – 2011
Highschool Diploma • average 88/100 (UK A*A*A*)	Northview Heights, Canada	2004 - 2007

Computational Tools

Experienced: Python, Fortran, Mathematica, Matlab, Linux, Bash scripting, Git, HPC¹, OpenMP.

Some experience: C++, Machine Learning, AWS.

Experience

Ph.D. Researcher

Imperial College London

Oct. 2014 - Dec. 2017

- Proposed a mathematical generalization of my supervisor's model, implemented and tested it in Fortran and successfully used it for new applications.
- Parametrized models by minimizing an error function defined on large sets of reference data
- Proposed, implemented O(2) faster method of finding self-consistent solution during model fitting
- Critically assessed relevant literature, proposed a hypothesis explaining model behaviour
- Implemented OpenMP parallelization in Fortran.

M.Sc. project

Imperial College London

Oct. 2013 - Sep. 2014

• Implemented a module in C++ and integrated it (via git) as part of a group software project

Outreach Postgraduate Ambassador

Wohl Reachout Lab, Imperial

Oct. 2014 - Dec. 2017

- Designed and delivered day-long workshops for students aged 14 17 on a set topic, which consisted of talks, demonstrations, visualizations, exercises and hands-on labs
- Developed workshop material for and trained newly qualified Outreach Ambassadors

¹High Performance Computer

Vadim Nemytov 2

Materials model developer, Researcher Materials Design s.a.r.l. Internship, Paris

Sep. 2016 - Dec. 2016

• Achieved set task of parametrizing a pair-additive model for NaCl, novel in its ability to reproduce *both* the solid and the molten states. Integrated it into company's proprietary MedeA software.

Funding team leader, School co-organizer Hermes Summer School 2016 Materials Modelling & Sci. Comm.

Oct. 2014 - Dec. 2017

- Led Funding team, raising £10730, balancing £25900 budget, with a surplus enabling 5 fully-funded scholarships for attendees from developing countries
- Co-designed summer school deciding on topic structure, series of communication workshops and individual and group tasks.

M.Sc. Project

McGill University

June 2011 – Jan. 2012

- Produced a written review of the theory of a recently discovered phase called Topological Insulator
- Implemented a model in Matlab which reproduced the Bi₂Se₃ Topological Insulator
- Formed a hypothesis that Cd₃As₂ is a new Topological Insulator; confirmed two years later².

Visiting Researcher

University of Hong Kong

Oct. 2011 - Dec. 2011

Extended a Finite Differences Matlab code to simulate quantum transport of electrons in Bi₂Se₃

Sales and Marketing Analyst

XLN Telecom, London

Mar. 2007 – Aug. 2007, May 2008 – Aug. 2008

- Developed the metrics to monitor and analyze quality and performance of the Sales team
- Analyzed call recordings, selected cases for staff training and team enhancement purposes
- As a Sales Manager's assistant, prepared daily and weekly reports on team related metrics

Awards

• Director's List mention for 80%+ MSc final average, Imperial College	2014
• Rubin Gruber Scholarship (1,000 \$), McGill University	2008
• Jeffery Scholarship in Science (2,000 \$), McGill University	2008
• J.W. McGonnel Award (1,000 \$), McGill University	2008
• Golden Key International Honours Society – membership by invitation	2008

Interests, Languages

- Interests: Football; indoor bouldering; dancing swing, improvised; reading Fiction, Economics, Philosophy, History, Mathematics; discovering own city by bike, country by visiting cities
- Languages: English, Russian, Lithuanian; Beginner's French.

Last updated: October 28, 2017

²digitool.library.mcgill.ca/thesisfile114415.pdf, Nature Materials 13, 677 - 681 (2014)