

Denis Biryukov

Research Scientist / Software developer

Le Plessis-Robinson (92) - Email me on Indeed: [indeed.com/r/Denis-Biryukov/ff3bfb7aa6897871](https://www.indeed.com/r/Denis-Biryukov/ff3bfb7aa6897871)

EXPÉRIENCE

Research Scientist (acoustic wireless networks)

Schlumberger - Clamart (92) -

2016 - actuellement

- 1.Developed Network Simulator for joint performance evaluation of Network and Physical layers
- 2.Developed application for automated post-job analysis of network performance
- 3.Developed application for automated analysis and processing of acoustic noise data recorded during the job
4. Developed and implemented algorithm for estimating speed of moving pipe with markers placed on it from a video record (Computer vision + Machine learning)

Technologies: Intel Parallel Studio, C++, C#, Matlab, Python, SQLite

R & D Engineer

Schlumberger - Clamart (92) -

2009 - 2016

- 1.Developed Simulator based on Boundary Elements Method for heterogeneous reservoir modeling
- 2.Conducted research on application of Boundary Elements Method to modeling heterogeneous (especially fractured) reservoirs
- 3.Gave courses to undergraduate students at L'Ecole Nationale Supérieure de Géologie (Nancy, France) on usage of MATLAB and mathematics in oilfield industry
- 4.Developed and implemented new mathematical models for wireline and well testing purposes

Technologies: Intel Parallel Studio, C++, Matlab

Data Base Software Developer

1C VDGB - Moscow, RU -

2006 - 2007

- 1.Modified existing software platforms (trading and accounting databases) to suit individual client needs

Technologies: Proprietary Language akin to mix of Visual Basic and SQL

FORMATION

Machine Learning

Coursera (Stanford University)

2017 - 2017

Ingénieure + Master en Hydrodynamics and Reservoir Engineering

Ecole Nationale Supérieure de Géologie/Ecole Nationale Supérieure d'Electricité et de Mécanique - Nancy (54)

2007 - 2009

Bsc. en Applied Mathematics and Informatics

Bauman Moscow State Technical University - Moscow, RU

2003 - 2007

COMPÉTENCE

MATHEMATICS (10 ans minimum), C++ (OpenGL, mkl, ipp, open mp, simd, CUDA) (8 ans), MATLAB (8 ans), SQL (2 ans), C# (1 an), python (1 an), Fortran (2 ans), Machine learning (1 an), Assembler (1 an)

LIENS

<https://github.com/Holic75/Baldurs-gate-dnd-3.5>

INFORMATIONS COMPLÉMENTAIRES

Skills

Foreign Languages: English: fluent, French: fluent, Russian: native, German: intermediate

Programming Languages: C++ (OpenGL, Intel MKL, OpenMP, SIMD, CUDA), C#, Python, SQL, Fortran, Matlab, Assembler

Development Environments: MS Visual Studio, Intel Parallel Studio, Eclipse (gcc, icc)

Mathematics: FEM/FVM/BEM techniques, Integral Equations, Machine Learning, Signal Processing

Personal Projects

<https://github.com/Holic75/Baldurs-gate-dnd-3.5> - a WeiDu mod for Baldurs Gate: Enhanced Edition that changes 2ed ADnD rules to DnD 3.5