

# Dmitrii B. (Amsterdam)

## Middle Python Software Engineer

### SUMMARY

- Python Software Engineer with 6+ years of experience in the IT industry
- Fluent English
- Beginner Dutch, German

### TECHNICAL SKILLS

<b>Main Technical Skills</b>	Python (6 yr.)
<b>Programming Languages</b>	C, C++, Python (6 yr.), R
<b>AI &amp; Machine Learning</b>	OpenCV
<b>Databases &amp; Management Systems / ORM</b>	SQL
<b>Azure Cloud Services</b>	Azure DevOps
<b>Version Control</b>	BitBucket, Git
<b>Third Party Tools / IDEs / SDK / Services</b>	CMake, MatLab
<b>Operating Systems</b>	Linux, Windows
<b>Other Technical Skills</b>	LaTeX

### Model Vadat

April 2019 - now

Rabobank, Utrecht

- Validation of a wide range of risk models within a bank: d Market Risk (VaR, SVaR, IRC, TRIM obligations) d Operational Risk (AMA model, reporting to ECB)
- Regulatory Capital (CPM, FX, Migration Matrix, Real Estate, NiGEM)
- ALM (Prepayment, LBB CPR)
- Developing tools to automate Model Validation activities

## **Mathematical Software Engineer**

October 2018 - February 2019

Ibeo Automotive Eindhoven B.V., Eindhoven

- Radar signal simulation and processing in MATLAB/C++

## **Mathematical Software Engineer**

October 2017 - September 2018

Sioux LIME, Eindhoven

- Mathematical consultancy for ASML, Nexperia, and ProRail:

d Mathematical modelling and numerical analysis of physical processes in MATLAB

d Computational Fluid Dynamics simulations in COMSOL

d Statistical analysis of experimental results in Python/Excel

d Fast detection of small objects using advanced image processing techniques in C++ (with OpenCV)

d Development of Convolutional Neural Network-based deep learning algorithm for image classification in Python/C++ (with Caffe)

## **Teaching Assistant**

February 2017 - July 2017

(Object Oriented Scientific Programming with C++ course)

TU Delft, Delft

- Assisting and supervising graduate students
- Evaluating and grading assignments

## **Programmer Analyst**

July 2013 - January 2014

ProfitLAB, Saint-Petersburg

- Development of automated trading systems
- Stock trading and strategies testing using TSLab on Moscow Exchange

## **EDUCATION**

### **Erasmus Mundus Joint MSc programme COSSE (Computer Simulation for Science and Engineering)**

September 2015 - September 2017



## **TU Delft, MSc, Applied Mathematics**

September 2016 - September 2017

Master thesis: Adaptive Deflated Multiscale Solvers (numerical experiments are implemented using MATLAB Reservoir Simulation Toolbox)

- **TU Berlin** September 2015 - August 2016

MSc, Scientific Computing

**Saint-Petersburg State University** September 2011 - June 2015

BSc with distinction, Applied Mathematics and Informatics

Bachelor thesis: Mathematical models of competition in biology and economics

(the model is based on the system of nonlinear PDEs and solved numerically using MATLAB)

## COURSEWORK

TU Delft

- < Introduction to High Performance Computing
- < Parallel Programming
- < Martingales, Brownian Motion and Stochastic Processes
- < Programming and Data Science

TU Berlin

- < Scientific Computing
- < Numerical Linear Algebra
- < Matrix Theory
- < Numerical Methods for Engineering
- < Differential Algebraic Equations

Coursera Certificates

(John Hopkins University)

- < The Data Scientist's Toolbox < Getting and Cleaning Data
- < Exploratory Data Analysis
- < R Programming

IBM Analytics Badges

- < Hadoop Programming < Watson Analytics

