Graduate student of engineering school specializing in Applied Mathematics at EISTI, Cergy

TUMASHKINA Diana
95014 Cergy
+33 7 69 00 67 95

EDUCATION

2018-2020 • **Master in Quantitative Finance and Risk Management** • École Internationale des Sciences du Traitement de l'Information (EISTI), Cergy, France
Model Simulation and Calibration. Option Pricing Models. Monte-Carlo. Markov Chains. PDE. Finite Difference Methods. Stochastic Processes. Advanced Numerical Methods.

2017 – 2019 • **Master in Applied Mathematics and Computer Science** • National Research Tomsk State University, Russia, Tomsk
Probability Theory. Queueing Theory. Mathematical Modeling. Simulation.

2013 – 2017 • **Bachelor in Applied Mathematics and Computer Science** • National Research Tomsk State University, Russia, Tomsk *(équivalent BAC +4)*
Mathematical Statistics. Econometrics. Markov processes. Object Oriented Programming. Stochastic Integration.

2012 – 2013 • **Practical psychologist** • Pavlodar State Pedagogical Institute, Kazakhstan, Pavlodar

SKILLS AND KNOWLEDGES

- **VBA** (MS Word/Excel)
- **Python** (Anaconda, Spyder, JupyterLab) – pandas, numpy, sklearn, tkinter
- **Matlab, Simulink,** R **(RStudio), Mathcad**, Statistica, Scilab
- **SQL** in ORACLE, SQLite, MS Access
- C++/C# (Environment Visual Studio)
- LaTeX
- Bloomberg terminal
- Français (A2-B1), Anglais (B2-C1), Russe (native)

PROJECTS

Matlab Projet (2019) : Chaînes de Markov en finance

- Monte-Carlo Markov Chain utilisation (MCMC)
- Dynamic Programming utilisation

Matlab Projet (2019) : Calibration of the financial model based on market data (S&P 500)

- Analysis of implied volatility
- Manipulation of the Black-Scholes Model.

Mathematical research (2015-2019) : Investigation of Semi-synchronous Point Process of the Second Order

- Mathematical research in areas of applied probabilistic analysis and queueing theory
- New formulas were derived for the estimation of the process states and parameters by observing the dataset of events.
- Result: **12 scientific papers** (3 are indexed in **Scopus**, 1 in **Web of Science**)

PROFESSIONAL EXPERIENCES

2017 – 2019 • **Computer Science, Information Technology, Project Management teacher** • College of Commerce and Services, Russia, Tomsk

CERTIFICATIONS

2019 • **Data Analyst in Python** • Dataquest.io
2018 • **Bloomberg Market Concepts** • Bloomberg LP

diana-tumashkina.github.io
/diana-tumashkina
diana1323@mail.ru