

Experience

- Oct 2022 – May 2024 **Data Scientist**, [CreativeLift](#), Paris, France
- Worked on a pipeline for extracting creative insights based on historical video ads performances,
 - Proposed and lead efforts on implementing SOTA causal inference models such as double machine learning into production which resulted into game-changing quantitative and qualitative improvement of our creative insights,
 - Together with sales team worked on delivering the insights in the most intuitive and actionable way to our clients.
- [Causal Inference in Practice at CreativeLift: Finding Creative Insights for Video Ads. \[medium\]](#)
- Dec 2018 – July 2022 **Industrial PhD student**, [Skopai](#), Grenoble, France
- Created data collection pipelines to retrieve and analyze various information about startups; used NLP for texts analysis,
 - Built machine learning models (including deep learning, domain adaptation, etc.) to predict startup success and valuation,
 - Used causal discovery methods to identify key factors of startup valuation and their relations,
 - Published in high-impact venues including A-conference in information retrieval ([European Conference on Information Retrieval](#)), and one of the most influential business journals ([Entrepreneurship Theory and Practice](#)).
- Feb 2018 – July 2018 **Research Intern**, [Inria](#), [Thoth team](#), Grenoble, France
- Under the supervision of [Dr. Cordelia Schmid](#), I studied hard-exploration reinforcement learning problems on the example of the Montezuma's revenge Atari game and applied methods such as Deep Q Learning with intrinsic motivation to tackle it.
- Jan 2017 – May 2017 **Research Intern**, [Inria](#), [Nano-D team](#), Grenoble, France
- Together with [Dr. Sergei Grudinin](#) we created the widely used computational biophysics software for the fast and efficient calculation of small angle X-ray scattering curves on biological molecules – [Pepsi-SAXS](#) project.

Education

- 2018 – 2022 **PhD in Computer Science**, [University of Grenoble Alpes](#), Grenoble, France
Supervisor: [Eric Gaussier](#), Thesis title: Startup Valuation and Fundraising.
- 2017 – 2018 **MSc in Industrial and Applied Mathematics**, [University of Grenoble Alpes](#), Grenoble, France, data science track
- 2015 – 2017 **MSc in Biophysics**, [Moscow Institute of Physics and Technology](#), Moscow, Russia
- 2011 – 2015 **BSc in Applied Mathematics and Physics**, [Moscow Institute of Physics and Technology](#), Moscow, Russia
- [Additional](#)
- Apr-Sep 2023 **Colloquia**, [A Thematic Quarter on Causality](#), Paris/Grenoble, France
- 2016 – 2018 **MSc level program in Computer Science**, [Yandex School of Data Analysis](#), remote, data science track
Highly selective master equivalent program from Yandex with the best industry and academic tutors.

Skills

Data Processing & Analysis: NumPy, pandas, SQL, dbt, MongoDB

Machine Learning & Statistical Modeling: Time Series Analysis, Deep Learning, Reinforcement Learning, Natural Language Processing, Explainable Artificial Intelligence, Statistics, Hypothesis Testing, Causal Inference

Programming & Frameworks: Python, R, SciPy, scikit-learn, XGBoost, PyTorch, NLTK, Transformers

ML Operations & Deployment: Google Cloud Platform, Vertex AI, docker, git, CI/CD, Streamlit, Retool

Publications

- M. Garkavenko et al.* Assessing the Factors Related to a Start-up's Valuation using Prediction and Causal Discovery. *Entrepreneurship Theory and Practice*, 2022, <https://doi.org/10.1177/10422587221121291>
- M. Garkavenko et al.* Valuation of Startups: a Machine Learning Perspective. 43rd European Conference on Information Retrieval, Springer, 2021, https://doi.org/10.1007/978-3-030-72113-8_12
- M. Garkavenko et al.* Where Do You Want To Invest? Predicting Startup Funding From Freely, Publicly Available Web Information. *ArXiv*, 2022, <https://doi.org/10.48550/arXiv.2204.06479>
- S. Grudinin, M. Garkavenko, A. Kazennov.* Pepsi-SAXS : an adaptive method for rapid and accurate computation of small-angle X-ray scattering profiles. *Acta Cryst.*, 2017, <https://doi.org/10.1107/S2059798317005745>

Miscellaneous

- Open Source Contrib. **CatBoost:** As a Yandex School of Data Analysis student, I had a machine learning engineering practice in the CatBoost team. I [participated](#) in implementing Poisson regression with gradient-boosted trees and created official tutorials on Poisson regression and categorical features encodings in CatBoost
- Writing **Categorical features parameters in CatBoost [medium]**, *Official CatBoost tutorial on categorical features*
Tutorial: Poisson regression with CatBoost [medium], *Official CatBoost tutorial on Poisson regression*