

Aleksei Mashlakov

Antwerp
Belgium
mashlakov@gmail.com
July 17, 2022



Resumé

Experience

- March 2022 – **Innovation Specialist**, *Centrica Business Solutions Belgium*, Antwerp, Belgium.
 - R&D in flexibility markets & management at the European H2020 projects
- September 2017– **Junior Researcher**, *LUT University*, Lappeenranta, Finland.
- September 2021
 - Research in flexibility management at the national and European H2020 projects
- July 2016 – **Industrial Design Intern**, *Schneider Electric*, Moscow, Russia.
- August 2016
 - Redesign and major update of two PRM portals in Industrial Automation unit
- June 2015 – **Project Manager Assistant**, *ABS Electro*, Moscow, Russia.
- December 2015
 - Conformance inspection of technical requirements and proposals

Education

- 2017–2021 **D.Sc. (Tech) in Energy Market and Solar Economy**, *LUT University*, Finland.
 - 6 month research exchange to School of Computing, University of Leeds, UK
- 2015–2017 **M.Sc. (Tech) in Electrical Engineering**, *LUT University*, Lappeenranta, Finland.
 - Double degree programm with NRU MPEI, Russia, *With Honors*
- 2011–2015 **B.Sc. (Tech) in Electrical Power Engineering**, *NRU MPEI*, Moscow, Russia.

Projects

- 2021 **Battery techno-economic optimization**, *Publication*.
 - Applied ML and SO for multi-objective predictive management of battery storage
- 2021 **Battery flexibility bidding to reserve market**, *DOMINOES H2020 project*.
 - Applied ML and MILP for predictive bidding of battery storage to reserve market
- 2020 **Prosumer flexibility optimization**, *Publication*.
 - Applied MILP for techno-socio-economic optimization of prosumer battery storage
- 2020 **Multivariate probabilistic energy forecasting**, *Publication*.
 - Applied DL models to several energy forecasting problems

Skills

- Coding Python, R, \LaTeX , Bash
- ML operations Pandas, Polars, GluonTS, DARTS, PyTorch, Tensorflow, Sklearn, Ray, MLFlow, Optuna
- OR software cvxpy, cvxstoc, I-EPOS, scipy
- Workflows OOP, CI/CD, EDA, multithreading, asynchronous programming
- Visualization matplotlib, plotly, seaborn
- Web Development Flask, Tornado, Grafana, Influx, Redis
- CI/CD Docker, conda, Git, pytest
- Soft skills presentation, teamwork, divergent thinking, self-management, perseverance

Languages

- English Proficient user (TOEFL 95)

Interests

Professional Data-driven decision making, digital energy democracy, virtual power plants

Leisure Travelling, Movies (Science-Fiction), Photography

Sport Football, Volleyball, Cycling, Gym