

ULAN TORE

+7 747 9739902 ◇ ture.ulan@gmail.com ◇ github.com/ulantore19

EDUCATION

BEng in Electrical and Computer Engineering

2019 - 2023

Nazarbayev University, Nur-Sultan (Astana), **GPA: 3.71/4.0** (Ranked 3rd in class of 71)

EXPERIENCE

Research Assistant | Data Science Lab

February 2022 - Present

- Working on an image classification problem (**Keras**, **scikit-learn**).
- Implemented "endometriosis" status prediction classifier. Tuned model based on ROC AUC score.

Research Assistant | Complex Network and System Lab

April 2021 - December 2021

- Worked on a project "Optimum Control of SAIS epidemic Spreading Process over Signed Network". Implemented the Runge-Kutta method to obtain an analytical solution of the ODE (SAIS epidemic model), and used Monte-Carlo simulation to match the analytical solution. Both methods were coded in Python, **networkx**, **numpy**.

Intern | KazAeroSpace (KAS)

December 2021

- Contributed to the team developing a prototype of the camera stabilizer platform for the plane. The prototype was based on **Arduino** microcontroller. As an electrical engineer was responsible for sustainable hardware and software operation of the system.

Junior Specialist | Nordal

August 2021 - October 2021

- Member of the team developing reliability-centered maintenance (RCM) for the largest uranium mining deposit "Инкай" (Inkai, Kazatomprom). Responsible for automatization of the calculation of reliability parameters, such as MTBF, MTTR, availability, and reliability by **openpyxl**.

PROJECTS

Web scrapping (BeautifulSoup)

- Extracted vacancies information from hh.kz using title query and stored them in SQLite database.
- Web scraper is robust for bot-check by constantly changing user agents and it prevents server overload.

Face Parsing (Keras)

- End-to-end model development (onnx)
- Leveraged U-net model with a backbone for face semantic segmentation.
- Evaluated model performance based on Intersection Over Union (0.75)

Churn prediction (scikit-learn) - Datathon Arbuz.kz case

- Feature engineering (one-hot encoding, binning).
- Ensemble learning: AdaBoost, XGBoost, RandomForest.
- Achieved macro F1-score of 0.64 on the test set.

SKILLS HIGHLIGHTS

Programming Skills

Python, SQL, MATLAB/Octave, C++, Verilog

Libraries and frameworks

NumPy, Pandas, Matplotlib, scikit-learn, PyTorch, Keras, networkx.

Others

MS Excel, Power BI

CERTIFICATES/ACHIEVEMENTS

- Datathon winner of Arbuz.kz case.
- Finalist of the "Student Digital Fest": Optimization of oil pipeline transportation.
- Dean's list Fall 2019, Fall 2022.

- KPMG Data Analytics Virtual Experience Program

EXTRA-CIRRUCULAR ACTIVITIES

Board member in Google Developers Student's Chapter (GDSC).	2022 – Present
Team Leader, contributed to providing internships in a "Samruk energy" for the NU students, NU IEEE Student Chapter.	2019 – 2021
Math and English tutor for children from socially vulnerable groups, NU-Red Crescent Society.	2018 - 2019