#### **Beksultan Tuleev**

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Birthdate: 21.10.1995



#### **Profile**

I am an experienced Data Scientist, who is passionate about automation and efficiency. Open-minded towards cutting-edge technologies and certified Linux user. Proactive team player with a focus on collaboration.

#### **Work Experience**

04/2022 – 03/2023 NUR Telecom LLC, Kyrgyz Republic

#### **Data Scientist and Data Automation Engineer**

- Improved ML model prediction of Active Customers for the next fiscal month with 99% recall and precision
- Designed and implemented a versatile library to facilitate connection and manipulation of Oracle databases, leveraging efficient algorithms for seamless handling of regular and spatial data
- Developed a Chatbot for remote monitoring and management of Windows scheduled tasks and job management in Oracle. Bot vastly reduced the effort and time for control and maintenance from 30 to 3 minutes on average
- Implemented an automatic failure recovery mechanism for Windows machines, which allows failed scheduled tasks to be automatically restarted in the event of external failures. The mechanism improved the reliability and significantly reduced downtime from 50 to 5 minutes on average

06/2021 – 10/2021 The Openwork Partnership, the United Kingdom

#### **Data Scientist Intern**

- Developed Multi-Output ML models for predicting customers with a high likelihood of purchasing protection products in different income segments with AUC of more than 85%
- Reduced the number of features required for accurate predictions (from approx. 150 to 10) through the use of RFE, resulting in a more efficient and cost-effective model
- Achieved a 88% in precision and recall scores after feature selection and model calibration, indicating a better balance between true positives and false positives/negatives in the model's predictions

02/2019 – 09/2019 **Mercy Corps**, Kyrgyz Republic

#### **Procurement and IT assistant**

As a Procurement Assistant at Mercy Corps, I sourced and purchased kitchen equipment for a food security project in rural areas, improving access to healthy food for children. My work supported the successful implementation of the project and contributed to long-term community development

08/2018 – 01/2019 United Nations Development Programme, Kyrgyz Republic

#### **Project Management Assistant Intern**

 As a Project Management Assistant at UNDP, I provided administrative support for a project aimed at protecting snow leopards and their habitats. I coordinated logistics and assisted with reporting, contributing to the successful implementation of the project and promoting sustainable development in the communities we served

#### Education

09/2019 - 03/2022

University of Trento, Trento, Italy

**Degree**: Master of Science in Data Science

Thesis: Non-line-of-sight Detection And Mitigation Using Machine

Learning For Indoor Positioning Ultra-wideband System

09/2017 – 12/2018

**OSCE Academy**, Bishkek, Kyrgyz Republic

Degree: Master of Arts in Economic Governance and Development <u>Thesis:</u> The Impact of Trade Openness on Technical Efficiency in the

Agricultural Sector in Post-Soviet Countries 1990-2014

09/2013 – 06/2017

American University of Central Asia, Bishkek, Kyrgyz Republic

**Degree**: Bachelor of Arts in Economics

Thesis: Quantitative Economics Research, The Application Of Dantzig's

Simplex Algorithm On The Micro-construction Company

#### **Skills**

**Programming Languages** 

Python, Java, C#, SQL, R

Frameworks & Libraries

TensorFlow, sklearn, pandas, numpy, Aiogram, Angular, WildFly

**Databases** 

PL/SQL, PostgreSQL, InfluxDB, ClickHouse

**Tool & Services** 

Git, GitLab, MQTT, Jira, Docker, WSL, Linux, MS Office, PowerBI,

Tableau, ML

### **Projects**

Visualization of **Reference Signal Received Power in** Tableau

The project visualizes signal strength data obtained from NetMAX using Tableau, a powerful data visualization software. By representing the average signal strength or RSRP (Reference Signal Received Power) of each point on a map, the project enables users to easily

identify areas with poor signal coverage. With this information, network operators can take the necessary steps to improve the quality of their network coverage in these areas, ultimately leading to a better user experience for their customers. Overall, the project offers a simple and effective solution for analyzing and optimizing network coverage

Technologies used: Tableau, Python, Oracle, GeoPandas

## LOS/NLOS detection and mitigation

This project used an Ultra-Wideband (UWB) system to improve indoor positioning accuracy by training a machine learning model to detect Non-Line-Of-Sight (NLOS) signals caused by obstacles like walls and furniture. The model was a neural network that could identify NLOS signals and was combined with filters that conditionally ignore NLOS measurements. The project's findings could improve location-based services in various domains like healthcare, retail, and logistics

Technologies used: Raspberry Pi, WSL, Python, C, UWB, TensorFlow

# Real-time Location Tracking and Trilateral Wi-Fi Positioning

This project developed a real-time positioning system that used WiFi signals and Trilateration to track the location of users. The system included a visualization using the Matplotlib library and a warning feature that alerted users if they came too close to each other, which was especially relevant during the pandemic. The project provided an effective solution for real-time positioning and crowd management, while also promoting public health and safety

Technologies used: WSL, Node-red, Python, JavaScript, Wi-Fi, MQTT

# Application of Ultra-Wideband System in Unmanned Areal Vehicle (UAV)

The system provides an application of Ultra-Wideband (UWB) technology to unmanned aerial vehicles (UAVs) for accurate positioning in indoor environments. The project utilized a Kalman filter to combine the Inertial Measurement Unit (IMU) of the UAV with an external UWB tag, ensuring centimetre-level accuracy for indoor aerial handling. By providing precise positioning, the UWB system enabled small UAVs or mini drones to perform complex tasks with greater accuracy, enhancing their capabilities in indoor environments

Technologies used: Raspberry Pi, WSL, Python, MQTT, UWB

### Languages

English Advanced (C1)

German Learning

München, 20.04.2023

