



# Alpysbay Marua

CARTOGRAPHER

## PROFILE

I am a cartographer with experience in geographic information systems and digitalization. Additionally, I have experience in coordinating work with stakeholders and am focused on achieving project results.

## SKILLS

- *Processing aerial and satellite imagery: ENVI, Photomod, ERDAS IMAGINE, SNAP, Agisoft Professional, Scanex Image Processor, Google Earth Engine*
- *GIS and mapping: ArcGIS, QGIS, AutoCAD, ArcGIS PRO, MAPINFO*
- *Other: Microsoft Office, Corel Draw, Adobe Photoshop, Adobe Illustrator*
- *JavaScript, Python*
- *Website creation based on Tilda, Nicepage*

## WORK EXPERIENCE

### Senior Lecturer/ Leading Researcher

*Satbayev University | Sep 2020 - Present (flexible schedule)*

- Preparation and delivery of lectures, development of educational materials, and maintaining a high level of interaction with the audience.
- Teaching courses: "Applied Photogrammetry," "Space Photogrammetry," "Remote Sensing of the Earth," "Aerospace Imaging Methods."
- Work in a scientific project with program-targeted funding

### Head of Digitalization and Information Technology Department

*Branch "National Cartographic-Geodetic Fund" | Jan 2021 - Jan 2023*

- Development of a web portal for cartographic materials.
- Creation of an online store for thematic maps.
- Development of thematic maps (Map of the Republic of Kazakhstan, map of regions, geological map, etc.)
- Implementation of an information system for comprehensive automation.
- Conversion of digital topographic maps into digital maps for public use.

### Principal Researcher

*Institute of Ionosphere | Jun 2020 - Aug 2020*

- Processing and analysis of satellite imagery for forest fire monitoring.
- Writing reports on the results of conducted research and presenting the findings of scientific work.
- Working with databases, analyzing and processing data, compiling statistical reports.

# EDUCATION

## Al-Farabi Kazakh National University

*PhD in Geodesy | Sep 2019 - Aug 2022*

- PhD Dissertation: "Development of a Crop Yield Prediction Model using Vegetation Indices, GPS Technologies, and Neural Network Methods." International Scientific
- Consultant: S. Skakun, PhD, Associate Professor, University of Maryland, USA.
- Academic Advisor: PhD, Kaldybaev A.A.
- Internship: March to May 2022 at St. Petersburg State University, St. Petersburg, Russia.

## Al-Farabi Kazakh National University

*Master's degree in Cartography | Sep 2017 - Jun 2019*

- GPA: 3.97 (out of 4.00) Degree with honors
- Thesis topic: "Development of Technology for Detection and Monitoring of Oil Pollution in the Caspian Sea."
- Academic Advisor: PhD, Kaldybaev A.A.

## Al-Farabi Kazakh National University

*Bachelor's degree in Geodesy and Cartography | Sep 2013 - Jun 2017*

- GPA: 3.93 (out of 4.00) Degree with honors
- Thesis topic: "Study of the Impact of the Kapchagay Reservoir on the Environment and Its Cartography."

# LANGUAGES

- Kazakh (native)
- Russian (fluent)
- English (B1)
- French (A1)
- German (A1)

- Data collection and analysis for report writing

## Researcher

*Institute of Ionosphere | Oct 2019 - Jun 2020*

- Conducting scientific research in accordance with the goals and objectives of the scientific program or project.
- Analyzing and interpreting collected data.
- Preparing scientific reports, articles, and publications of research results in journals, monographs, conference proceedings, and other scientific publications.
- Participating in international scientific conferences.

## Senior Lecturer

*Al-Farabi Kazakh National University | Sep 2019 - May 2020*

- Planning and conducting classes in accordance with the course curriculum, preparing necessary materials for the classes, and assessing students' assignments and coursework.
- Teaching courses: "GIS in Geodesy," "Automated Systems for Geodetic Data Processing."

## Lead Engineer

*Institute of Ionosphere | May 2018 - Oct 2019*

- Conducted extensive experiments and analyzed data to develop technology for monitoring oil pollution.
- Collaborated with a team of scientists to successfully publish a scientific paper.
- Developed and implemented new methods that enhanced overall efficiency and accuracy.
- Worked on multiple research tasks simultaneously, meeting project deadlines and ensuring high-quality results.

# OTHER

- I continuously enhance my qualifications through various open-source resources such as EDX, Coursera, and ESRI. I have scientific publications and actively participate in international conferences. I am also an author of educational and methodological materials. In my free time, I enjoy drawing and reading books as hobbies.