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Experience

2024 Oct	HELLA, Vienna, Austria
2025 May	Research Engineer <ul style="list-style-type: none">• Created, verified, and improved optical and mechanical models using CATIA.• Optical verification via ray tracing; iterative model refinement.• Automated MATLAB+PowerShell pipeline for geometry → simulation → adaptation.
2021 Dec	CPI-KIEV, Kyiv, Ukraine
2022 Nov	Junior Research Engineer <ul style="list-style-type: none">• Optical design & simulation (SolidWorks, Zemax); lab setups (Thorlabs), MATLAB automation.• Python/TensorFlow for parameter selection and optimization.
2021 Sep	Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, Ukraine
2021 Dec	Junior Researcher, Cryolaboratory <ul style="list-style-type: none">• Low-temperature physics; I–V of photoresistors; type-II superconductors.

Education

2022 Jan	Johannes Kepler University, Linz, Austria
2023 Dec	Student exchange, Faculty of Technical Physics <ul style="list-style-type: none">• Diploma work: “<i>Spectrum of visible and near-infrared range of hydrogel nanocomposites AgNP–PVA cross-linked by electron beam irradiation.</i>”• Python for approximation, filtering, cleaning, visualization; UV–Vis, FTIR; tensile tests.
2019 Sep	Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, Ukraine
2023 Jun	Bachelor’s degree in Applied Physics <ul style="list-style-type: none">• Core physics; mathematics; programming (Python, MATLAB, C++); 3D modeling (AutoCAD).

Projects

Satellite Data Science in Google Earth Engine

- Participated in an international project on land-surface estimation using Google Earth Engine (Java).
- Developed and trained a CNN for satellite data analysis; used multiple spectral channels and composites.

- Applied QGIS for training-point selection and validation; produced detailed crop-field maps for agronomic research.

Technical Skills

Python (NumPy, Pandas, Matplotlib), C/C++, MATLAB (Simulink), SolidWorks, AutoCAD, CATIA, QGIS, Zemax, Git, Linux, MySQL, Jira, L^AT_EX, AVR MCUs

Languages

English (Upper-intermediate), German (Elementary), Ukrainian (Native), Russian (Native)