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(ISTA)
Klosterneuburg, Austria*

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Experience

2024 Oct
2025 May

HELLA, Vienna, Austria

Research Engineer

- 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
2022 Nov

CPI-KIEV, Kyiv, Ukraine

Junior Research Engineer

- Optical design & simulation (SolidWorks, Zemax); lab setups (Thorlabs), MATLAB automation.
- Python/TensorFlow for parameter selection and optimization.

2021 Sep
2021 Dec

Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, Ukraine

Junior Researcher, Cryolaboratory

- Low-temperature physics; I–V of photoresistors; type-II superconductors.

Education

2022 Jan
2023 Dec

Johannes Kepler University, Linz, Austria

Student exchange, Faculty of Technical Physics

- Diploma work: *“Spectrum of visible and near-infrared range of hydrogel nanocomposites AgNP–PVA cross-linked by electron beam irradiation.”*
- Python for approximation, filtering, cleaning, visualization; UV–Vis, FTIR; tensile tests.

2019 Sep
2023 Jun

Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, Ukraine

Bachelor’s degree in Applied Physics

- 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)