

WE'RE HIRING AN INTERN



● Data Science & Database Intern

Every measurement our devices take ends up in a central database that feeds both our matching algorithms and our machine-learning models. As the number of samples grows, two things decide how good our results are: how clean and well-structured that database is, and how rigorously we evaluate the methods running on top of it. We are looking for a student to take ownership of exactly this area. You will work directly with our AI & Product lead and the R&D team, and your results will feed straight into the product.

Key Responsibilities

- Run and evaluate experiments comparing spectral evaluation methods and models; track runs and report metrics.
- Maintain and clean the measurement database: quality checks, duplicates, inconsistent labels, referential integrity.
- Support data-schema changes and migrations as our model of samples, substances and measurements evolves.
- Automate the data pipeline: reproducible snapshots, spectral preprocessing, versioned datasets.
- Turn results into clear reports and visualisations for the R&D and science teams.

What We Offer

- Work with real measurement data from physical instruments, not public datasets.
- Ownership of a well-defined area — the database and the evaluation pipeline are yours to improve.
- Direct mentorship from our AI & Product lead, and an end-to-end view from raw spectra to the identification algorithm.
- Financial compensation in line with InnovPrecMed project rules.
- Flexible setup and the possibility to continue the collaboration after the internship.

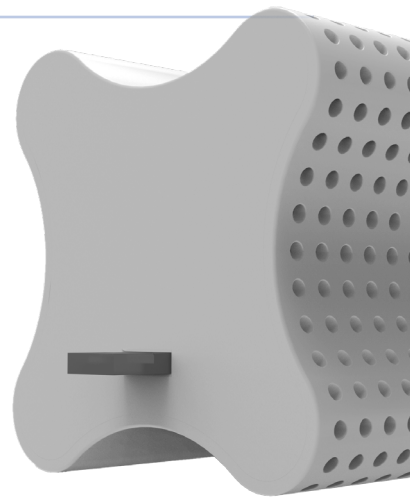
Requirements

- Enrolled university student (Bachelor's, Master's or PhD programme).
- Solid Python (numpy, pandas, scikit-learn) and the ability to write small, readable scripts.
- Practical SQL and hands-on experience with a relational database.
- Confident everyday use of AI tools for writing code, exploring data and documenting work.
- Interest in machine learning and in working with real, noisy measurement data.
- Careful, systematic approach — you notice when the numbers do not add up.
- Good written and spoken English (working language of the InnovPrecMed programme).
- Ability to commit to at least 3 months.
- An advantage: Microsoft Azure (Azure SQL), Git, spectral or signal processing, MLflow or a similar tracking tool.

About Lightly Technologies

Lightly Technologies, s.r.o. is an innovative deep-tech startup based in Brno, Czech Republic. We develop a portable chemical analyzer based on our patented UV-Fingerprint technology that enables rapid, field-ready detection and identification of chemical substances (drugs, pharmaceuticals, food adulterants) in under 10 minutes, without requiring laboratory calibration.

Our technology combines advanced photochemistry, bioanalytical methods and machine learning. We work closely with law enforcement agencies including the Czech Police, INTERPOL, and U.S. federal agencies.



How to Apply

Send your CV to:

Alex Paroulek

alex.paroulek@lightly.bio

This internship is offered as part of the InnovPrecMed programme.

<https://www.innovprecmed.eu>

