

# Daniil Aktanka

Sustainable Systems Engineer



daniil-aktanka



akthonka



daniil\_aktanka@proton.me



+41 (0) 798266155

## PERSONAL STATEMENT

As an experienced engineer with a background in data science and sustainability, I am currently advancing my expertise in project management, business strategy, and risk engineering at UCL. This degree marks a strategic pivot in my career, bridging my technical acumen with managerial insights.

## EXPERIENCE

### STM MINERALS AG TECHNICAL ASSISTANCE ENGINEER

Aug 2020 - Jul 2023 | Baden, CH

- Directed initiation, planning and execution project phases of an industrial-grade IoT hardware product and cloud service for both internal and external use. Spearheaded system engineering design as well as programming development. Launched a new, internal, company database.
- Created and maintained a MATLAB App Designer software tool (3k+ lines) for company mill-sizing purposes. The tool features multiple internal data-structures, dynamic UI elements and elaborate plot visualizations with built-in data model extrapolations. Approved for use by both sales and engineering departments.
- Assessed and systematized methodology for grinding-media filling-level computation. Proposed additional uncertainty correction methods to account for slurry density variation using 3D linear data extrapolation. Collaborated on industrial product design solution.

### STM MINERALS AG ENGINEER INTERN

Aug 2019 - Jul 2020 | Baden, CH

- Investigated temporal relationship between strain-gauge voltage and grinding-media filling-level. Performed data cleaning and analysis in python via pandas and XGBoost machine learning.
- Designed and developed a VBA UserForm script (1k+ lines) for efficient document parsing and automation. Simplified commissioning engineers' workflow and improved team's performance by reducing test-report document processing time by ≈83% per project.
- Consulted in electrical-engineering document standardization. Designed and created standardized templates for piping and instrumentation diagrams.

## PROJECTS

### JOB APPLICATION AUTOFILLER 2023 | PYTHON (SELENIUM), JAVASCRIPT

- A tool designed to navigate and fill common webpage form fields, with GUI. Accounts for naming variability using an internal database with regex parsing.

### POWER FLOW SIMULATION ANALYSIS 2023 | PYTHON (PANDAS, PANDAPOWER)

- "Electric Vehicles in Energy Communities: Investigating the Distribution Grid Hosting Capacity (BSc SSE thesis)". Proposed a semi-coordinated energy-community EV charging pattern with a 30% improvement of grid stability for low-voltage European grids, based on historical data.

## EDUCATION

### MSC TECHNOLOGY MANAGEMENT

Sep 2023 - 2024

UNIVERSITY COLLEGE LONDON

### MANAGEMENT ESSENTIALS COURSE

Jul 2022

HARVARD BUSINESS SCHOOL  
ONLINE

### BSC SUSTAINABLE SYSTEMS ENGINEERING

Sep 2020 - 2023

UNIVERSITY OF FREIBURG

## SKILLS

### PROGRAMMING

Experienced:

Python • MATLAB • L<sup>A</sup>T<sub>E</sub>X

Familiar:

SQL • JS • VBA • C • git

### SOFTWARE

Profficient:

Microsoft Office • Visio •  
Adobe Photoshop/Lightroom

### LANGUAGES

Native/C1 diploma:

English • Russian • German

Confident/B2.1 level:

French

## INTERESTS

### HOBBIES

Photography • Art