

Field Project Atelier 2026

Instructors

prof. Michele Lanza
ing. Mauro Prevostini



Introduction

Introduction

This Booklet describes the list of field project positions available at the companies participating to the Field Project Atelier (SA5) during Fall semester 2026.

The Field Project Atelier consists of an experience in collaboration with a company.

The goal is for the students to obtain hands-on experience with real world problems. The Field Project Atelier can be done individually or as a group, depending on the given context.

Since 2014 the Faculty of Informatics collaborated in this context with 59 companies offering field projects to 256 students.

This year we have 19 companies on board, offering a total of 34 positions.

FPA 2026 Schedule

The Field Project Atelier 2026 will take place from September 18 to December 11, 2026, at the company on Thursdays and Fridays.

Important dates are as follows:

- September 17: Kick-off meeting at USI
- September 18: Beginning of the field project at the company
- October 21: Update meeting students-instructors at USI
- November 25: Update meeting students-instructors at USI
- December 11: Closing session at USI

All meeting mentioned above are mandatory in order to obtain the 9 ECTS.

Students' Duties

You are given time until May 03 to express your preferences ranked as 1, 2, 3, 4 by means of the following form

<https://sa5.si.usi.ch/>

Should a student not do so, he/she will be assigned a project.


To access the platform <https://sa5.si.usi.ch/> please follow the next three steps:

- 1) click on the bottom square "Login with switch"
- 2) click on SWITCH EDU-ID
- 3) use your SWITCH EDU-ID account to log in



List of Field Projects

4BMC Sagl

	
Website	https://4bmc.ch
Contact	Carlo Vespa , carlo@4bmc.ch
Number of available positions	1
Address	Via Luganetto 4, 6962 Viganello
Mode of Work	In Presence
Languages Requested	English
Previous Field Project Atelier SA5 participation	2022, 2023, 2024, 2025

Company Description

4BMC is a Solutions Agency that helps SMEs harness the power of advanced technologies, including artificial intelligence (AI) and blockchain, to improve their operations and offerings. The agency focuses on leveraging these technologies to provide innovative solutions and services that enhance efficiency, security, and market insights. With a suite of tools ranging from AI analytics to blockchain applications, 4BMC aims to equip businesses with the capabilities to thrive in a digital landscape,

Project Title

Bandosubito

Project Description

The student will have the opportunity to engage in a dynamic and innovative environment of 4BMC by working on Bandosubito, an AI-based platform revolutionizing the way private individuals and organizations access subsidized finance opportunities. By leveraging the power of artificial intelligence, Bandosubito simplifies the complex landscape of European, national, and local grants, matching the unique characteristics and goals of users with the most suitable funding opportunities available in its extensive database.

Working on the Bandosubito project, the student could be involved in a variety of technical aspects, depending on their skills and interests. For those inclined towards front-end development, tasks might include enhancing the user interface and user experience (UI/UX) of the web application. This could involve designing and implementing intuitive and attractive interfaces, improving the navigation flow, or integrating interactive features that make the search and application process as smooth as possible for users.

Alternatively, students with a passion for back-end development might work on the infrastructure of the web application. This could involve developing and maintaining the servers, databases, and application logic that power Bandosubito. One critical task could be implementing web scrapers to continually update the grant database with the latest funding opportunities. This requires a keen eye for data extraction, transformation, and loading (ETL) processes, as well as an understanding of how to maintain data integrity and relevance.


Moreover, students may have the chance to add new features to the platform, such as personalized grant recommendations based on user profiles, automated alerts for new grants matching specific criteria, or tools to streamline the application process for grants. These enhancements would not only improve the user experience but also increase the value Bandosubito provides to its users, making it an indispensable tool in the search for subsidized financing.

Working on Bandosubito offers students a unique opportunity to apply their technical skills to real-world challenges, contributing to a product that has a tangible impact on individuals and organizations seeking financial support for their projects. Through this experience, students can gain valuable insights into the intersection of technology, finance, and public policy, while also honing their development skills in a practical setting.

Technologies to be used

python (django), html, css, javascript (vue3)

Acer Europe AG

	
Website	https://acer.com
Contact	Emanuele Meazzo(emanuele.meazzo@acer.com), Amin Alizadeh (amin.alizadeh@acer.com)
Number of available positions	1
Address	Via della Posta 28, 6934 Bioggio
Mode of Work	Hybrid (50% in presence and 50% remote)
Languages Requested	Italian and English
Previous Field Project Atelier SA5 participation	2025

Company Description

Acer Inc (Acer) is global information and communications technology (ICT) company that develops, designs, markets, and exports IT products. The company's product portfolio comprises personal computers, projectors, tablet PCs, smartphones, wearables, smart devices, monitors, servers, gaming products and ICT devices.

Project Title

Exploration of Enterprise AI Solutions

Project Description

During the internship, the student will contribute to ongoing AI initiatives by working on small prototypes, experiments, and improvements across different areas of enterprise AI.

The activities may include:

- Supporting the development of AI-powered assistant functionalities for internal use
- Exploring how AI can interact with business data and tools
- Improving the way information is retrieved and presented to users
- Assisting in evaluating AI outputs and system performance
- Contributing to small features, testing, or proof-of-concept implementations

The intern will have the opportunity to work with real business use cases and datasets, gaining hands on experience with how AI systems are designed, tested, and improved in a production-like environment.

The scope of work will remain flexible and may evolve based on priorities, the intern's interests, and ongoing projects.


Learning Objectives

- Understand how AI solutions are applied in enterprise environments
- Gain experience with modern AI concepts such as LLMs, RAG, and automation
- Learn how to design, test, and evaluate AI workflows
- Develop practical skills in Python and API-based systems
- Collaborate within a cross-functional technical team

Technologies to be used

Python, REST APIs, API integration, Large Language Models (LLMs), prompt engineering, Retrieval-Augmented Generation (RAG), data processing and analysis, cloud platforms (Azure or similar), Git version control, debugging and testing

adesso Schweiz AG

	
Website	www.adesso.ch/en
Contact	Nicole De Monti - nicole.de-monti@adesso.ch (TBD)
Number of available positions	1
Address	Corso Enrico Pestalozzi 9, 6900 Lugano
Mode of Work	To be defined
Languages Requested	English
Previous Field Project Atelier SA5 participation	None

Company Description

adesso Schweiz AG is an independent IT service provider with a focus on consulting, individual software development and integrating software into companies' core business processes. adesso's strategy is built on three pillars: its employee's comprehensive industry expertise, a broad range of technological skills and proven methods for implementing software projects. adesso Schweiz AG is part of the adesso Group.

Project Title

SpendZen budget manager

Project Description

We want to build a web app that helps project managers keep control of their budgets without Excel. Today, they need to download data from Abacus (our time logging application), copy it into spreadsheets and create charts manually. This is slow, boring and error prone.

The SpendZen tool will:

- automatically load project and budget data from Abacus exports,
- show a clear overview of each project's budget, what is already used, and what is left,
- display simple graphs over time (day, week, month) so PMs can quickly see if a project is at risk.


The first version will focus on project managers in Lugano (users). If they use it regularly and it saves them time, we will improve it further and roll it out to other locations.

Technologies to be used

A low-code platform: probably Mendix

Number of positions available 1 = 1 team of 3/4

AIL SA

	
Website	www.ail.ch
Contact	Project 1) Leopoldo Ceré, lcere@ail.ch Project 2) Michael Nyffeler, mnyffeler@ail.ch
Number of available positions	Project 1) 2 Project 2) 2
Address	Via Industria 2, 6933 Muzzano
Mode of Work	To be defined
Languages Requested	Italian and English
Previous Field Project Atelier SA5 participation	None

Company Description

Siamo il principale distributore di energia in Ticino. Operiamo nei settori dell'elettricità, gas, acqua e calore, garantendo qualità e affidabilità. Investiamo nei nostri collaboratori, promuovendo formazione, sviluppo e innovazione. La sostenibilità è un valore centrale della nostra strategia e guida il nostro impegno per la transizione energetica. Legati al territorio, creiamo valore insieme alla comunità valorizzando risorse locali.

Project 1

Project Title

Anomaly Detection for PV Plants and Smart Electric Meters at AIL

Project Description

Project description:

[IT] AIL gestisce diversi impianti fotovoltaici e una rete di contatori elettrici (per lo più smart) che trasmettono dati di misura a intervalli regolari. Il progetto si articola in due ambiti complementari, entrambi focalizzati sul rilevamento automatico di anomalie nei dati energetici.

Il primo ambito riguarda il monitoraggio delle performance degli impianti fotovoltaici: lo studente analizzerà le serie temporali delle curve di carico della produzione, le correlerà con i dati di irraggiamento solare disponibili e svilupperà una dashboard interattiva per identificare scostamenti significativi rispetto al comportamento atteso, segnalando eventuali anomalie operative, degrado delle performance o guasti.

Il secondo ambito riguarda i contatori elettrici smart: lo studente analizzerà i dati di misura raccolti dalla rete di contatori, identificherà pattern anomali quali valori mancanti, spike, derive o letture inconsistenti, e costruirà un sistema di alerting o una dashboard di monitoraggio a supporto del team operativo.

I due ambiti condividono metodologie comuni di analisi delle serie temporali e potranno convergere in un'unica piattaforma di monitoraggio integrata.

[EN] AIL manages several photovoltaic plants and a network of smart electric meters transmitting measurement data at regular intervals. The project is structured around two complementary areas, both focused on automatic anomaly detection in energy data.

The first area concerns the performance monitoring of photovoltaic plants: the student will analyze production load curve time series, correlate them with available solar irradiance data, and develop an interactive dashboard to identify significant deviations from expected plant behavior, flagging operational anomalies, performance degradation, or failures.

The second area concerns smart electric meters: the student will analyze measurement data collected from the meter network, identify anomalous patterns such as missing values, spikes, drifts, or inconsistent readings, and build an alerting system or monitoring dashboard to support AIL's operational team.

Both areas share common time series analysis methodologies and may converge into a single integrated monitoring platform.

Technologies to be used

Python (pandas, scikit-learn, statsmodels/Prophet), SQL or REST API for data ingestion, data visualization (e.g. Grafana, Plotly/Dash, or Power BI)

Data provided by AIL from real PV plants and smart metering infrastructure. The two areas share a common analytical framework.

Project 2

Project Title

Innovative Visualization and Aggregation of Electric Consumption Metrics

Project Description

Project description:

[IT] AIL dispone di un ampio parco clienti i cui dati di consumo elettrico vengono raccolti attraverso la rete di contatori smart. L'obiettivo del progetto è ripensare in modo innovativo i sistemi di visualizzazione e aggregazione di queste metriche, superando gli approcci tradizionali e sviluppando rappresentazioni più ricche, intuitive e significative per l'utente finale.

Lo studente progetterà e implementerà nuove modalità di aggregazione e visualizzazione dei dati di consumo, introducendo una categorizzazione intelligente dei profili energetici dei clienti. Un elemento centrale del progetto sarà l'associazione dei consumi a indicatori di virtuosismo comportamentale: verranno definiti e integrati parametri legati all'ottimizzazione energetica e alla sostenibilità, che permettano di valorizzare e incentivare comportamenti virtuosi da parte degli utenti, come il consumo nelle fasce orarie a basso impatto, la riduzione dei picchi o il miglioramento progressivo dell'efficienza. Il risultato atteso è una dashboard o un sistema di reporting innovativo che trasformi i dati grezzi di consumo in informazioni utili, accessibili e motivanti, capaci di supportare sia le analisi interne di AIL sia una comunicazione più efficace verso i clienti finali.

[EN] AIL manages a large customer base whose electricity consumption data is collected through the smart meter network. The goal of this project is to rethink in an innovative way the visualization and aggregation systems for these metrics, going beyond traditional approaches and developing richer, more intuitive, and more meaningful representations for the end user.

The student will design and implement new methods for aggregating and visualizing consumption data, introducing intelligent categorization of customer energy profiles. A central element of the project will be the association of consumption patterns with behavioral sustainability indicators: parameters related to energy optimization and environmental awareness will be defined and integrated, making it possible to highlight and encourage virtuous behaviors such as consumption during low-impact time slots, peak reduction, or progressive efficiency improvements.


The expected outcome is an innovative dashboard or reporting system that transforms raw consumption data into useful, accessible, and motivating information, capable of supporting both AIL's internal analyses and more effective communication toward end customers.

Technologies to be used

Python (pandas, numpy, scikit-learn), SQL, React or Vue.js

Data provided by AIL from the smart metering infrastructure. Focus on UX and innovative visual storytelling of energy consumption patterns.

Alten Switzerland AG

	
Website	https://www.alten.com/
Contact	SARA ORSI sara.orsi@alten.ch
Number of available positions	1
Address	Riedstrasse 11, 6330 Cham / ZG - Switzerland (Field Project Address: Corso San Gottardo 14, 6830 Chiasso)
Mode of Work	To be defined
Languages Requested	Italian and English
Previous Field Project Atelier SA5 participation	2024, 2025

Company Description

Alten is a Consultancy Firm providing support with a wide range of expertise in Engineering and IT Services in order to meet the technological needs of its clients. The Skills and Offers Department brings together and coordinates at the transnational level, specialists and consultants, experts in their profession who support our clients, in more than 30 countries, in their issues of digital transformation, innovation, product development, supply chain, change management, etc.

Project Title

Developing and Integrating Enterprise Banking Applications

Project Description

The main objective of this project is to give a concrete, hands-on experience of how modern enterprise systems are designed, developed, and integrated in banking environments. The added value lies in the opportunity to work with technologies, architectures, and practices that are widely used in the banking industry, allowing you to move beyond theory and build practical, industry-relevant skills.

During the project, you will be involved in the development and integration of banking applications, working on scenarios where multiple systems interact through middleware technologies. You will gain direct exposure to enterprise platforms such as JBoss, ESB, and OSB, and develop a clearer understanding of service-oriented architectures and distributed systems.

In addition, the project may include exposure to cloud migration initiatives, allowing you to understand how existing enterprise applications are progressively modernized and transitioned toward cloud-based or hybrid environments. This will help you become familiar with cloud adoption strategies, system modernization challenges, and the impact of cloud technologies on enterprise architecture.

From a technical perspective, you will focus on Java backend development using JDK 8 or higher. You will design and implement RESTful APIs, develop business logic, and handle aspects such as error management and logging. You will also work with relational databases such as MySQL, PostgreSQL, or Oracle, strengthening your SQL skills and your understanding of data management.

In addition, you will become familiar with essential development tools and practices, including version control systems like Git and CI/CD pipelines. Basic web technologies will support integration activities, while Unix environments and shell scripting will be used for automation and system management tasks. You will work in small teams and follow an iterative approach, with continuous support from both academic and company mentors. Through regular feedback sessions, code reviews, and technical workshops, you will gain a deeper understanding of the architectural principles behind the working solution.


Overall, this project will give direct exposure to enterprise environments, including cloud transformation initiatives, and help prepare you for a future career in the IT industry.

Technologies to be used

JDK 8+, JBoss, ESB, and OSB, MySQL, PostgreSQL, or Oracle, Git and CI/CD pipelines, Unix environment, OCI

Swiss Nationality is required

AnswerConsulting SA

	
Website	https://www.answerconsulting.ch/
Contact	Jacopo Malnati (j.malnati@answerconsulting.ch)
Number of available positions	2
Address	Via Penate 4, 6850, Mendrisio
Mode of Work	Hybrid (50% in presence and 50% remote)
Languages Requested	English
Previous Field Project Atelier SA5 participation	2024, 2025

Company Description

We help organizations reinvent Enterprise Content Management (ECM) through agile technology, world-class technical expertise, and strategic vision (and to you it means nothing, I get it. We are a cool, young team of hardcode coders, motorbikers, and amateur astronomers having fun in the office).

Project Title

AI and data visualization


Project Description

Design and implementation of processes related to big data analytics, including the analysis of how data is generated, accessed, and distributed. This encompasses both quantitative and qualitative data analysis, as well as the application of AI-driven analytics with advanced visualizations aimed at providing deeper insights into the data itself and into how AI functionalities are utilized in the analysis. The objective is to enable accurate attribution of token usage and associated costs across functionalities, projects, and different corporate cost centers.

Technologies to be used

Groovy, JavaScript

Banana.ch

	
Website	www.banana.ch
Contact	José, Del Romano, jose@banana.ch
Number of available positions	Project 1) 1 Project 2) 1
Address	Via la Santa 7, 6962 Viganello
Mode of Work	Hybrid (50% in presence and 50% remote)
Languages Requested	Italian and English
Previous Field Project Atelier SA5 participation	2019, 2020, 2021, 2022, 2023, 2024, 2025

Company Description

Banana.ch SA was founded in Lugano in 1990. The business is focused on the production and sale of Banana Accounting+, a financial accounting software for enterprising people, small businesses, association managers and individuals. Banana is a spreadsheet-inspired accounting software, has sold more than 300000 licenses worldwide and is a leader in Switzerland. In 2002 was the first accounting software in the world to introduce blockchain technology to ensure the legal validity of accounting data.

Project 1

Project Title

Swiss National Bank - Foreign Exchange rates

Project Description

Customers need to be able to access exchange rates easily and conveniently within our application.

The goal of this project is to develop a microservice, deployed in a Kubernetes environment, that periodically retrieves official exchange rates from the Swiss National Bank (SNB), synchronizes them, and makes them reliably available within the system.

The solution should eventually integrate the Monthly average currency rate VAT published by the Swiss Federal Tax Administration.

The service should ensure regular updates, proper error handling, scalability, and efficient data access for other components of the application.

Technologies to be used

Laravel, PHP, Kubernetes, Javascript

Project 2

Project Title

MCP server with Qt

Project Description

The goal of this project is to design and implement an MCP (Model Context Protocol) server using Qt/C++ that exposes accounting functionalities to an AI systems.

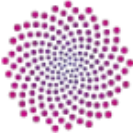
The server will act as an interface layer, enabling AI agents to securely access and interact with application data and services. It should provide well-defined endpoints specific for financial accounting , handle authentication and authorization, and ensure reliable communication between the AI clients and the underlying system.

Particular attention should be given to extensibility, security, and clear API design to support future integrations.

Technologies to be used

Qt 6.11, C++, Docker + MCP

Brightside Capital

 BRIGHTSIDE CAPITAL	
Website	https://brightside-capital.com/
Contact	Anxhela Vendresha (anxhela.vendresha@brightside-capital.com)
Number of available positions	3
Address	Via Balestra 11, 6900 Lugano
Mode of Work	In Presence
Languages Requested	English
Previous Field Project Atelier SA5 participation	2020, 2021, 2022, 2023, 2024, 2025

Company Description

Family Office - A financial advisor for Ultra High Net Worth Individuals or Families. We manage the interests of 22 Italian families through investment decision and spot-on reporting. We have a mixed imprint between the American world (young motivated team, competitive environment, meritocracy and team before the individual) and Latin culture, promoting, within that framework, your own creativity.

Project Title

Fintech Hub: Data Delivery Automation & Feature Enhancement

Project Description

Brightside Capital is a family office and wealth management firm based in Lugano, Switzerland, focused on guiding Europe's entrepreneurial families in becoming sophisticated investors — bridging heritage with long-term financial vision.

The company has developed an internal platform designed to automate and streamline the consolidation of financial data from multiple banking sources. The platform handles the full data lifecycle: automation of data collection from different banks, data quality checks, reconciliation, and preparation for transmission to the various software systems that form the broader ecosystem supporting Brightside's client services.

Initially deployed as an internal tool used by a small team, the platform has grown significantly in adoption as demand for the consolidation reporting service has increased. It is now used by a larger number of people within the organization, and the strategic roadmap envisions its evolution into a fully-fledged product that could be offered beyond the boundaries of the company — potentially to external clients or partner firms.

Project Scope:

In line with this growth trajectory, the project focuses on three main areas of work:

New Data Feeds – Integration of additional banking and financial data sources into the platform's automated collection layer, expanding coverage and ensuring compatibility with a broader range of institutions and data formats.


New Features – Development of new functional capabilities to meet evolving business requirements and support the platform's transition toward a market-ready product.

Improvement of Existing Features – Enhancement of current functionalities.

Technologies to be used

Python, Pandas, Django, Vue.js, PostgreSQL

CyberTel Group SAGL

 CyberTel Group	
Website	https://www.cybertelgroup.com/
Contact	Marco Moscini marco.moscini@cybertelgroup.com
Number of available positions	2
Address	Via Madonnetta 15, 6900 Lugano
Mode of Work	Remote
Languages Requested	Italian and English
Previous Field Project Atelier SA5 participation	2024, 2025

Company Description

Cybertel Group SAGL specializes in simplifying cybersecurity and IT challenges for small and medium-sized businesses. We offer tailored solutions that empower our clients by helping them reduce costs, and enhance efficiency. Through consultation, hardware, software, and training services in IT, power, and telecommunications, we're dedicated to helping our clientele make informed, secure, and cost-effective decisions for sustained success in the digital age.

Project Title

Decentralized Sensor Data Management for Critical Applications Using Blockchain Technology

Project Description

In critical sectors like energy and agriculture, continuous and verifiable monitoring of operational data is essential for efficiency, sustainability, and regulatory compliance. Yet traditional systems still rely on centralized, siloed platforms where data can be altered, shared poorly, and hardly audited — a fundamental obstacle to transparent, interoperable ecosystems.

What You'll Build

You will design and simulate a decentralized system that uses blockchain technology to collect, certify, and share sensor data across two domains:

- Energy: renewable production, grid quality, consumption, and emissions.
- Agriculture: soil moisture, weather conditions, water usage, and phytosanitary treatments.

The system is structured around four layers — acquisition, network, blockchain, and application — and will be implemented in an emulated environment, so no physical infrastructure is needed.

Key Technologies

You'll work with network emulation tools, distributed ledger platforms, consensus mechanisms (PoA, PBFT), and smart contracts for automated data validation. The result is an end-to-end pipeline: from simulated sensors to immutable on-chain records, queryable via custom interfaces.

What You'll Gain


This project sits at the intersection of networking, distributed systems, and software engineering — a combination that is increasingly in demand. You'll develop hands-on skills in blockchain architecture, smart contract development, and system simulation, while tackling a real-world problem with direct impact on energy markets, agri-food traceability, and carbon credit schemes.

If you're curious about how decentralized technologies can reshape critical infrastructure, this project gives you the tools — and the challenge — to find out.

Technologies to be used

Python, Docker, Networking, Virtual Machine, Linux, Ethereum blockchain, Industrial Protocols

DEC Energy

	
Website	www.dec-energy.ch
Contact	Lorenzo Guideri, lorenzo.guideri@dec-energy.ch
Number of available positions	1
Address	Via la Santa 1
Mode of Work	In Presence
Languages Requested	English
Previous Field Project Atelier SA5 participation	2025

Company Description

At DEC Energy, we're providing FinTech and SaaS products for corporates to replace the expensive and endless stack of solutions adopted by Sustainability & Energy Managers. We're starting by making profitable Scope 2 emission reduction! On our platform, corporates can rent solar panels located around Europe and self-generate Guarantees of Origin while earning money. We're on a mission to create the final Renewable Energy Platform for Corporate Sustainability.

Project Title

Building a Scalable Internal Admin Dashboard with Django

Project Description

We are looking for a motivated student to help design and build an internal admin dashboard for our company. The dashboard will serve as a centralized tool for our team to manage internal workflows, monitor key metrics, and perform custom administrative actions all through an intuitive web interface.

The project involves working on a real production-grade system following common CI/CD practices. You will gain hands-on experience with the full development lifecycle: discussing requirements, designing the architecture, implementing features, writing tests, and deploying the application in our environment.

You'll be assigned some responsibilities, some of which are:

- Designing and implementing a working backend system to support dashboard functionality such as user management, role-based access control, and custom operation triggers;
- Building a responsive frontend that communicates with the backend (Django templates or a lightweight JS framework, to be decided with the rest of the team);
- Setting up Docker-based development and deployment workflows, including Docker Compose for local development and CI-friendly container builds.
- Implementing authentication, authorization, and audit logging to ensure the dashboard meets internal security standards.
- Writing automated tests and documentation to ensure maintainability even after the end of your experience with us.

Students will work closely with our engineering team, participating in code reviews, sprint planning, and technical discussions. This is an opportunity to contribute to a product that will be actively used within the company, giving students a taste of professional software development in a real-world setting.

By the end of the project, students will have built and deployed a working admin dashboard, gained experience with modern development practices (version control, containerization, code review), and strengthened their skills in Python, Django, and DevOps fundamentals.

We value clean code, clear communication, and a willingness to learn. No prior experience with Django or Docker is strictly required: what matters to us most is curiosity and a solid foundation in programming.

Technologies to be used

Python, Django, Django REST Framework, Docker, Docker Compose, SQL, HTML/CSS, JavaScript, Git

Duferco

Duferco	
Website	www.duferco.com
Contact	fabio.iannello@duferco.com
Number of available positions	2
Address	Via Trevano 2A, 6900 Lugano
Mode of Work	Hybrid (50% in presence and 50% remote)
Languages Requested	English
Previous Field Project Atelier SA5 participation	2021, 2022, 2023, 2024, 2025

Company Description

Duferco is a global company with diverse interests spanning energy retail and trading, steel manufacturing, insurance, and logistics.

Project Title

Study and Prototyping of a Framework for Autonomous AI Agents and Decision Validation

Project Description

The project aims to explore the use of artificial intelligence–based agents capable of supporting semi-autonomous decision-making processes within business and application contexts.

Throughout the activity, students will be involved in the design, implementation, and evaluation of an experimental prototype focused on multi-agent systems or specialized agents for specific tasks, with particular attention to their ability to make autonomous decisions based on structured and unstructured inputs.

The planned activities will include:

- analysis of the state of the art in AI agents, orchestration frameworks, and autonomous decision-making systems;
- definition of the prototype architecture and the interaction flows among agents, users, and external systems;
- development of decision-making logic, validation rules, and control mechanisms;
- design of a testing and validation framework to verify the consistency, robustness, traceability, and quality of the generated decisions;
- definition of performance metrics and reporting of results.


The project will have an exploratory and applied research nature, with the goal of producing a technical and methodological foundation useful for future business developments in the field of agentic AI and intelligent automation.

Technologies to be used

Python, Large Language Models (LLMs), Databases, Frontend technologies, Agentic development tools, Monitoring and traceability systems

The project is available for up to two students that can work together.

Euler Hub SA

	
Website	https://www.eulerhub.ch/home
Contact	Alfredo Villa / Marco Soldati: avlugano@gmail.com
Number of available positions	3
Address	Via Favadin 5, 6964 Davesco-Soragno, Switzerland
Mode of Work	Hybrid (50% in presence and 50% remote)
Languages Requested	Italian and English
Previous Field Project Atelier SA5 participation	None

Company Description

Swiss Precision. Italian Style. International team. Real Impact. Euler Hub SA is a venture studio and innovation hub based in Italian-speaking Switzerland and part of The Tithe Value PLC group. It develops and accelerates projects in fintech, AI and Web3, transforming emerging technologies into scalable business models. Euler Hub supports startups, companies and investors in building digital platforms and innovative solutions for global markets.

Project Title

Go-to-Market Strategy for Euler Hub Technologies: From Patent to Scalable Venture

Project Description

This project aims to develop a comprehensive go-to-market strategy for one or more proprietary technologies or patents developed within Euler Hub. Students will analyze the commercial potential of these technologies and define the strategic pathway required to transform them from intellectual property assets into scalable ventures.

A core component of the project is Product Management: students will act as Product Managers and produce a structured technical product sheet for each selected product. Each sheet will clearly describe the product, its value proposition, key functionalities, target users, and use cases, with a strong focus on practical implementation.

Students will define how each product should be built from a technical perspective, outlining system architecture, technology stack, development logic, and integration requirements. They will also identify MVP features, prioritize functionalities, and design a realistic product development roadmap.

The project will cover market analysis, identification of target industries and customer segments, competitive landscape assessment, and the definition of viable business models. In parallel, students will address key product development aspects, including product-market fit, user experience, and scalability.

Students will also evaluate commercialization pathways such as licensing, venture creation, strategic partnerships, or integration into existing platforms.


The final outcome will be a set of professional product sheets combined with a practical market entry and product development roadmap for Euler Hub, including value proposition, product positioning, revenue models, partnership strategy, and an implementation plan aimed at accelerating adoption and scalability.

Technologies to be used

Students are expected to combine product management and technical skills, defining how each product is built and delivered. They will use modern stacks (e.g. Python, Node.js, React, cloud), UX tools, and PM platforms to design features, architecture, MVPs, and scalable go-to-market solutions.

Entrepreneurial mindset, global markets & fintech interest. Act as PMs, produce technical product sheets, define architecture, MVP, tech stack. Knowledge of tech hubs valued; Russian/Hebrew a plus.

Ex Machina Sagl

	
Website	https://exmachina.ch/
Contact	Marco Celeri marco.celeri@exmachina.ch
Number of available positions	1
Address	Quartiere Maghetti 20, 6900 Lugano
Mode of Work	In Presence
Languages Requested	Italian and English
Previous Field Project Atelier SA5 participation	2014, 2016, 2017, 2018, 2019, 2020, 2021, 2023, 2024, 2025

Company Description

Centro di competenza per le tecnologie open source, cloud computing, blockchain e AI. Dal 2005 serviamo aziende multinazionali e pubbliche amministrazioni in Svizzera e all'estero.

Project Title

Internship in Generative AI & Agentic Systems Development

Project Description

Ex Machina, with twenty years of experience in software development, renews its internship opportunity through its AILab, our internal unit dedicated to cutting-edge research and development in Artificial Intelligence. This year, the internship evolves to embrace the latest innovations in the field, focusing on the design and implementation of agentic systems and applications powered by Large Language Models (LLMs).

The intern will be fully integrated into the AILab team, participating in all team dynamics, from strategic brainstorming to hands-on development. The experience covers the entire lifecycle of an AI-powered software solution, from concept to deployment.

The core activities will focus on:


- Design and development of intelligent agent systems capable of automating complex business processes.
- Integration of Large Language Models (LLMs) — ranging from cloud-based APIs to self-hosted models — to create sophisticated solutions for advanced search, data analysis, and content generation.
- Selection, deployment, and management of open-source LLMs on-premise, addressing specific project needs regarding performance, customization, and data privacy.
- Creation of "expert-in-the-loop" systems, where AI collaborates with human operators to enhance decision-making and efficiency.
- Development of proactive and context-aware chatbots that go beyond simple Q&A.
- Architectural design of scalable and robust solutions that leverage generative AI technologies.
- DevOps activities for the management and deployment of AI-powered infrastructures.

Our approach provides a unique, hands-on experience with the underlying AI technology, going beyond simple API integration. The work environment reflects this evolution with a modern and balanced technology stack, including Python, Java (with a strong focus on Spring and the Spring AI library), and React/Typescript for front-end development. The intern will also leverage our internal framework, Cosmo42, designed to standardize and accelerate the development of complex AI applications. This experience represents a unique opportunity to acquire cutting-edge practical skills in the rapidly growing field of Generative AI, working alongside experienced professionals and actively contributing to real-world innovation.

Technologies to be used

Python (PyTorch, FastAPI, LangGraph) Java (Spring, Spring-ai) React, Typescript. Open Source models (mainly from Huggingface.co) and closed LLM models (OpenAI/Gemini/Claude/etc.) DevOps/MLOps (Linux shell scripts, Docker)

Freesby Sagl

	
Website	www.freesby.com
Contact	Nicol Valtolina, nicol.valtolina@gmail.com, info@freesby.com
Number of available positions	2
Address	Via Nassa 62, 6900 Lugano
Mode of Work	In Presence
Languages Requested	Italian
Previous Field Project Atelier SA5 participation	None

Company Description

Freesby Sagl is a Swiss Company specializing in high-tech sporting goods for pets. The prototype currently under development is a sports harness made of a 3D knit material and featuring unique ergonomics that allow dogs to move naturally both when training and running. A training and agility app is also under development, allowing for the measurement of complex metrics during competitions.

Project Title

Freesby App

Project Description

Freesby application will be measure complex metrics during dog competitions agility training or running. The tracking platform designed to collect, analyze, and visualize biomechanical and activity data from dogs during outdoor activities such as agility training, hiking, running, and general exercise.

The system integrates a sensor-enabled dog harness with a mobile application that processes movement data and provides actionable insights into the dog's performance, workload, and movement quality.

The goal of the project is to design and prototype the software platform and analytics pipeline capable of transforming raw sensor data into meaningful metrics for dog owners, trainers, and sport enthusiasts.

Main functions:

Bluetooth communication with the harness

Activity recording sessions

Real-time activity monitoring

Data visualization

Performance analytics

Cloud synchronization

Technologies to be used


Flutter

Firebase

Python per analytics

BLE communication

Hurricane Studio Sagl

	
Website	www.hurricanestudio.ch
Contact	Theo Blank, info@studiohurricane.com
Number of available positions	1
Address	Via Franco Zorzi 29A, 6900 Paradiso
Mode of Work	Hybrid (50% in presence and 50% remote)
Languages Requested	Italian and English
Previous Field Project Atelier SA5 participation	None

Company Description

Hurricane Studio was conceptualized in 2021 as a start-up on making educational and commercial video games. Currently we have launched our first commercial mobile game (Chomper Mobile) and are working towards creating an educational video game that teaches sustainable development (to be played in classrooms and at home). We are a team of 3, and are looking to expand the team via internships and contractual work.

Project Title

Terraneers - Evidence-based Educational Video Game about Sustainable Development

Project Description

The Goal:

Project Terraneers is an initiative in creating a hub for educational video games to teach complex and multidisciplinary topics. Using the latest research on game-based learning, we are able to help students to learn and apply their knowledge in a virtual environment.

The Game:

Topic: An educational video game about sustainable development

Genre: Simulation / management city builder

Platform: Mobile

Objective: Students work together to try different approaches in growing a virtual town sustainably

Features:

-Teacher Dashboard: enables teachers to customize gameplay modes, moderate live sessions, and debrief at the end of each playing session.

-Multiplayer: an entire class will be able to participate in a single gaming sessions, encouraging collaboration to achieve tasks.

-Playable roles: Students will be able to choose from town mayor, zoning, services and infrastructure roles.

-Ecopedia: A virtual informational manual where students will have to refer and learn from in order to achieve the game objectives.

Applicants Information:

We use Unity for the development of the game, so previous experience in Unity is appreciated but not necessary. Any knowledge of the programming language C# is also a bonus.

You will be working alongside our main programmer in the following systems for the foundational game design:

-Road & Zoning System (classic city builder mechanics-- i.e Cities Skylines II, SimCity Build It)

---Road placements

---Zoning different residential, commercial and industry areas

-Resource System (Developing a economic and resource system to grow and advance in your city)

---Tier 1, 2 and 3 resources

---Building - material - level up system


Technologies to be used

As an assistant developer you will be asked to use:

- Unity 3D (main software)
- Third party assets from Unity Asset Store (i.e Navmesh, etc..)
- Miro Board (work management system, i.e Jira or Trello)

We are very excited about this project and we hope you will be as well. Working at Hurricane, you will get to experience a small start-up environment.

Junior Enterprise Lugano

 Junior Enterprise Lugano	
Website	linktr.ee/jellugano
Contact	Vito, Armenti, vito.armenti@usi.ch
Number of available positions	2
Address	Via Zurigo, 1
Mode of Work	Remote
Languages Requested	Italian and English
Previous Field Project Atelier SA5 participation	None

Company Description

Junior Enterprise Lugano (JEL) is a non-profit student association that connects universities and businesses through real consulting projects and collaborations. It offers students from USI, SUPSI and Franklin University a multi-campus ecosystem to develop professional skills. As part of the Junior Enterprise Switzerland network, JEL fosters entrepreneurship and innovation, bridging the gap between academia and the professional world.

Project Title

myJEL — Development of a Custom Web Application for Junior Enterprise Lugano's

Project Description

The project consists in the design and development of a full-stack web application — myJEL — to serve as the central digital platform for Junior Enterprise Lugano (JEL). The application will digitize and streamline key associative processes, including member authentication, meeting attendance tracking via QR code, Google Calendar integration for viewing the weekly agenda and a gamification system for tracking member contributions and redeeming rewards.

The platform will be built by adapting an existing open-source codebase developed and maintained by JEMIB (Junior Enterprise Milano-Bicocca) within a cross-border partnership between the two Junior Enterprises. The student's work will involve understanding the existing architecture, reconfiguring the system to operate with JEL's organizational structure, Notion databases and Google Workspace accounts, and customizing the user interface and branding to reflect JEL's identity. Additional tasks may include implementing new features tailored to JEL's specific operational needs and documenting the adaptation process to facilitate future reuse by other Junior Enterprises.

The project offers a realistic software engineering experience: the student will work with production-grade code, collaborate with an external technical team (JEMIB's IT&BI area), manage integration with third-party APIs, and deliver a deployable product used by a real organization.


This project is part of a broader partnership between JEMIB and JEL, two Junior Enterprises belonging to the JE Italy and JE Switzerland networks. The collaboration aligns with the Junior Enterprise movement's mission of bridging academic learning and professional practice through real-world projects. For the student, this represents an opportunity to work on an existing, production-level codebase within a structured, cross-organizational collaboration — an experience that closely mirrors real industry workflows. JEMIB's technical team will provide onboarding support, access to the codebase and technical documentation, and ongoing guidance throughout the project. The final deliverable — a fully functional myJEL instance — will be actively used by JEL's members, giving the student's work immediate, tangible impact.

Technologies to be used

Full-stack stack: Next.js (React), TypeScript, AuthJS (Google OAuth), Notion API (database), Google Calendar API. Tools: Git, GitHub, HTML, CSS, Tailwind CSS, REST APIs. Deployment: Vercel or equivalent. A production-level project mirroring real industry workflows.

Given the partnership between JEL and JEMIB, Vito Armenti will serve as the intermediary contact between the student and the JEMIB IT team to support the technical development of the myJEL instance.

Lighthouse Tech SA

 LIGHT HOUSE	
Website	https://www.lighthousetech.ch/
Contact	Andrea Messa - andrea.messa@lighthousetech.ch
Number of available positions	2
Address	Via Maestri Comacini 10C, 6834 Morbio Inferiore
Mode of Work	Hybrid (50% in presence and 50% remote)
Languages Requested	Italian and English
Previous Field Project Atelier SA5 participation	None

Company Description

Lighthouse Tech is a Swiss startup, founded as an optical industry spinoff. Our mission is to create a more inclusive world where people who are blind or have low vision can move confidently, make their own choices, and live life to the fullest. We believe that technology should be intuitive, stylish, and supportive, just like TAMI, our assistive mobility eyewear designed to help navigate life with freedom and safety.

Project Title

Development of a Radar Classification System for Human and Material Recognition in Smart Glasses for Visually Impaired Individuals

Project Description

The project aims to develop and validate a classification system capable of identifying material characteristics detected by radar (e.g., humans, metals, fabrics, or hard surfaces), with a particular focus on human recognition as the primary application.

The project will explore the behavior of radar waves according to the type of reflecting surface, evaluating two complementary approaches:


- Pre-processed data analysis: using measurements already provided by the current API to design lightweight classification algorithms compatible with the existing firmware architecture.
- Raw data analysis: extending the firmware to access low-level radar signals, enabling more advanced processing techniques or low-complexity machine learning models optimized for wearable devices

Technologies to be used

C/C++, microcontrollers, ML

The proposed project may involve 1-2 students depending on depth of research and outcomes.

Real Frame Sagl

	
Website	realframe.ch
Contact	Joel Kleibs joel.kleibs@usi.ch
Number of available positions	2
Address	Via alla Roggia 16, 6962 Viganello
Mode of Work	To be defined
Languages Requested	English
Previous Field Project Atelier SA5 participation	None

Company Description

The company develops and commercializes software and SaaS solutions for digital identity, data management, authentication, and document verification. It is a startup founded in 2026 by students of the Master in Financial Technology, with its registered office in Lugano.

Project Title

Real Frame Admin & Analytics Dashboard

Project Description

Realframe (RF) provides DID-based login and verifiable credential (VC) verification as an API that other products can integrate into their own UIs. Instead of delivering a white-label user interface, RF needs an internal-facing web dashboard for organizations that onboard to our ecosystem: an information management and analytics tool that helps companies configure their login and credential workflows, manage trusted issuers, and track verification activity.

In this field project, the student will build an MVP “RF Dashboard” that supports:

- Organization onboarding & admin area: manage organization profile, environments (dev/prod if applicable), and basic access control (roles/permissions)
- DID login policy management: configure what a relying party is allowed to learn (e.g., “18+ only”, “country of origin”, or “full PII”), and manage application/client settings used for API-based login
- Trusted issuer management: add/remove trusted issuers, view issuer metadata, and configure trust rules for which credentials are accepted
- Credential management & issuance interface: create credential templates, issue verifiable credentials to users (via an issuer flow provided by RF), and view issued credential records/status
- Credential validation flows: UI flows to validate credentials and display results (success/failure, reason codes), including an audit log of validation events
- Analytics & monitoring: dashboards for key metrics (number of validations, success rate, active clients, issuance count, usage over time), with filters by date/client/credential type

The implementation should include frontend structure and data binding: a clean API client layer, typed models, state management, caching where appropriate, and standardized loading/error/empty states. The student will also (ideally) produce minimal documentation so future developers can extend the dashboard quickly.


We will provide a prioritized backlog, initial wireframes (partial), and API/database contracts (or mocks if needed). Scope can be adjusted to match the student’s profile, but the goal is a demo-ready dashboard with several end-to-end flows.

Technologies to be used

TypeScript, React (Next.js or Vite), REST/JSON (OpenAPI optional), UI library (e.g., MUI/shadcn), state/data layer (TanStack Query/Zustand), NPM Libraries, authentication (JWT/OAuth), Git/GitHub, Docker (optional), (potentially) Ethers.js/Web3.js

Goal: MVP admin dashboard with end-to-end flows (policy setup, issuers, issuance, validation, analytics). Can be split into “UI/UX” and “integration/data binding” roles if needed.

WellD Sagl

	
Website	https://www.welld.ch/
Contact	Matteo Codogno, matteo.codogno@welld.ch
Number of available positions	1
Address	Via Campagna 13, 6982 Agno
Mode of Work	In Presence
Languages Requested	Italian
Previous Field Project Atelier SA5 participation	2019, 2023, 2025

Company Description

We are a software house with almost 15 years of successful activity in Ticino and abroad. Our mission is to bring quality in software development, embracing continuous improvement practices and treating our customers' products as our own. We believe in continuous learning and in professional community building, and boost many training and knowledge-sharing activities. Our work spans from web to mobile apps, in domains like finance, healthcare, energy, industry automation and more.

Project Title

AI-Powered Natural Language Assistant for Koordy, WellID's Internal ERP Platform

Project Description

WellID is extending Koordy, its proprietary multi-tenant ERP platform built for service-oriented organizations, with an integrated AI assistant capable of understanding and executing complex business operations through natural language. A student participating in the project will actively contribute to the design and implementation of this conversational layer.

Key areas of development include building an AI agent capable of interacting with core ERP modules — such as HR management, activity scheduling, invoicing, and transport logistics — through natural language queries and commands. The student will help design prompt engineering strategies, tool-calling pipelines, and retrieval-augmented generation (RAG) patterns to ground the assistant's responses in real company data stored in a PostgreSQL/Supabase backend.

Additionally, they will contribute to implementing secure, role-aware AI interactions, ensuring the assistant respects the existing RBAC and Row Level Security model so that users only retrieve and act on data they are authorized to access. The student will also explore conversational UX patterns for embedding the assistant within the existing React frontend, making everyday ERP tasks — from scheduling a recurring activity to generating an invoice — accessible through a simple chat interface.

This hands-on experience will expose the student to production-grade AI integration, function-calling architectures, and enterprise security constraints, at the intersection of modern LLM tooling and real-world business software.

Technologies to be used

Next.js, React, TypeScript, Supabase (PostgreSQL + RLS), Anthropic Claude API (or OpenAI), LangChain / VercelAI SDK

We require the student to be at our Agno office for the time spent on the project. On Fridays, the student will also have the chance to take part in our bi-weekly Tech Lunches (free pizza!).

Companies Location

