info@sviesusprojektai.lt
+370 680 33214

Horizon Europe 2027 AI in Education - Technical Partner Profile and EdTech Portfolio

Document	Partner Profile
Recipient	Horizon Europe Cluster 2 Consortium Coordinators and Research Partners
Target Calls	HORIZON-CL2-2027-TRANSFO-05-06
Version & Date	V2.0 | 2026-11-05
Status	**Information**
Prepared by	Mindaugas Samulionis, MB „Šviesūs projektai“ (Bright Projects)

MB „Šviesūs projektai“ (Bright Projects, Lithuania - Widening Country EdTech and AI engineering SME with nearly 10 years of educational platform engineering, creator of the ExoClass club administration platform with ~25 000 registered children and 30 000+ parents and the internal management system for Robotics Academy with 10 000+ active children, an in-house AI R&D Lab for end-to-end process automation, and over 1.20 million € in recent public-sector EdTech, AI and digital testing contracts) offers to join or co-coordinate Horizon Europe 2027 consortia for calls HORIZON-CL2-2027-01-TRANSFO-05 and HORIZON-CL2-2027-01-TRANSFO-06 as Work Package 3 Technical Leader and Work Package 5 Lithuanian School Pilot Leader.

1. Executive Summary: Why Bright Projects Strengthens Your Consortium

MB „Šviesūs projektai“ (English trade name: **Bright Projects**, Registration Code 304581214, VAT LT100014390519, Kaunas, Lithuania) is a research-intensive EdTech and Artificial Intelligence engineering SME from a Widening Member State. For **nearly 10 years**, our team has engineered and scaled high-load digital education platforms: - We engineered and built **ExoClass (exoclass.lt)** - a large-scale extracurricular and club administration platform with **~25 000 children registered in clubs and 30 000+ parents** who register for new programs, manage schedules and attendance, and process tuition payments; - We built the complete internal administration, ERP, CRM, and learning management system for **Robotics Academy („Robotikos akademija“)** - Lithuania's largest non-formal STEAM and robotics education organization serving **10 000+ active school-age children and 15 000+ parents** nationwide; - Over the past three years, we expanded into national formal-education digital learning, IMS QTI 2.2 / 3.0 computer-based assessment, virtual STEM inquiry laboratories, and explainable AI (XAI) early-warning systems for the National Agency for Education of Lithuania (NŠA), public K-12 schools, and national authorities.

(Note on formal completion certificates: public procurement tables only require formal completion certificates from the last 3-5 years - where our certified public and enterprise contracts exceed 1.20 million € -

whereas the large-scale education administration systems we engineered for ExoClass and Robotics Academy span nearly a decade of continuous operation).

We bring five concrete assets to a Horizon Europe Cluster 2 consortium:

1. **Nearly 10 Years of Large-Scale EdTech Engineering („ExoClass“ ~25 000 Children, „Robotics Academy“ 10 000+ Children) + National Formal Education Systems (TRL 5-8):** Alongside the large-scale non-formal education systems built for ExoClass (~25 000 registered children) and Robotics Academy (10 000+ active children), we deliver national formal-education platforms for NŠA: Digital Physics Learning Platform for Gymnasium Grades III and IV (287 980 €), National A1-C2 Reading and Language Assessment with AI scoring (29 040 €), National Exam Task Digitization (19 790 €), the National Knowledge Examination Platform VAS (296 450 €), and K-12 Student Achievement and Behavioral Risk Early-Warning Systems (30 250 €).
2. **In-House AI and Process Automation R&D Lab („Bright Projects AI / R&D Lab“):** We operate a dedicated internal AI R&D laboratory focused on **end-to-end automation of all internal engineering, document, QA, and operational processes to achieve maximum organizational efficiency** - developing and stress-testing autonomous multi-agent workflows, hybrid knowledge tracing models („SAINT+“ Transformers + Gradient Boosting), Lithuanian/multilingual NLP evaluators, voice/TTS synthesis, and automated testing harnesses.
3. **Direct Alignment with Calls TRANSFO-05 and TRANSFO-06:** Our engineering stack directly covers Intelligent Tutoring Systems (ITS), multimodal learning analytics (xAPI + QTI 3.0), foundational skills in reading, mathematics, and science, and Teacher Co-Pilots that reduce routine administrative and grading workload by at least 35 %.
4. **EU AI Act (Regulation (EU) 2024/1689, Annex III Point 3) Compliance by Design:** Our proprietary „EduPredict AI Engine“ combines Self-Attentive Neural Knowledge Tracing („SAINT+“) and behavioral analytics with local SHAP explainability (XAI), algorithmic fairness auditing („Demographic Parity“ and „Equalized Odds“), and mandatory Human-in-the-Loop teacher oversight.
5. **Turnkey Lithuanian School Living Lab for Longitudinal cRCT (WP5):** Signed Letters of Intent and active integrations with Lithuanian primary, lower-secondary, and gymnasium schools (12-15 schools, 800+ formal-education pupils).

2. Flagship EdTech Systems, In-House AI R&D Lab & Public Contracts

The table below summarises both the **large-scale education management platforms engineered by our team** (including long-term systems developed over > 5-10 years), our **in-house AI R&D Lab**, and our **recent certified public-sector & enterprise contracts** (last 3 years, > 1.20M €).

No.	Client / Platform and Project	Technical Scope, Scale (Users / Standards) and AI Capabilities	Scale / Contract Value
1.	**Robotics Academy (VšĮ „Robotikos akademija“)** - Complete Internal Administration, ERP, CRM & AI Student Retention Ecosystem	• **Full Internal Management System for Lithuania's #1 STEAM Network:** engineered the complete internal administration, group scheduling, teacher/mentor lesson delivery, municipal non-formal education voucher (NVŠ) reporting, parent self-service, QR longitudinal student career/interest surveys, and embedded AI tools for **10 000+ active children and 15 000+ parents** across Lithuania. • **AI Retention & Content Engine (Certified 2024 Upgrade):** automated feature engineering, Collaborative Filtering content recommendation, and real-time (< 200 ms) student dropout / churn prediction.	**10 000+ active students / 15 000+ parents** *(Core ERP/LMS > 5 yrs; plus certified 2024 AI module: **39 056 € excl. VAT**)*
2.	**ExoClass (exoclass.lt)** - Extracurricular & Club Administration Platform Engineered by Bright Projects (Separate EdTech Company)	• **End-to-End Club Administration Platform (~25 000 Registered Children & 30 000+ Parents):** engineered the complete multi-organization club administration platform where **~25 000 children are registered in clubs** and **30 000+ parents** enroll in new programs, sign digital contracts, track schedules and attendance, schedule make-up classes, receive automated notifications, and pay club tuition fees.	**~25 000 registered children / 30 000+ parents** *(Production Multi-Tenant EdTech SaaS Platform)*

No.	Client / Platform and Project	Technical Scope, Scale (Users / Standards) and AI Capabilities	Scale / Contract Value
3.	**Bright Projects In-House AI & Process Automation R&D Lab (AI / R&D Lab & EduPredict AI Engine)**	• **Internal AI Automation & Maximum-Efficiency R&D Lab:** dedicated in-house R&D lab automating all internal engineering, document generation, QA testing, and operational workflows via autonomous multi-agent systems, LLM/NLP evaluation pipelines, computer-use QA agents, and ExoSign QES/ADOC document intelligence. • **„EduPredict AI Engine" (TRL 5-7):** hybrid deep learning architecture combining „SAINT+" (Self-Attentive Neural Knowledge Tracing) Transformers, Gradient Boosting (XGBoost / LightGBM) behavioral anomaly detectors, fine-tuned BERT NLP for teacher notes, and SHAP Explainable AI (XAI) with EU AI Act Annex III fairness auditing.	**In-House AI Automation R&D Lab & Core Background IP (TRL 5-7)**
4.	**National Agency for Education of Lithuania (NŠA)** - Combined National EdTech and Digital Assessment Portfolio (3 Contracts): 4.1. National Digital Physics Learning Platform for Gymnasium Grades III-IV (PPS-388, Lots 1-2); 4.2. National Lithuanian Language (A1-C2) Electronic Testing & AI Assessment System „Kalbėkime Lietuvai" (KL1-10); 4.3. National Assessment Task Digitization (F5-351).	• **Digital Physics Platform (Lots 1 and 2):** 810 interactive QTI 2.2 tasks, 35 virtual inquiry-based physics lab simulations (interactivity levels II-III), xAPI Learning Record Store (LRS) telemetry, and national „Emokykla" OAuth 2.0 SSO integration. • **A1-C2 Language Testing System:** electronic reading, listening, writing, and speaking tests (QTI / TAO standard), studio audio, AI-generated visual stimuli, and AI-assisted automated response evaluation. • **Task Digitization:** conversion of national assessment items into interactive QTI digital tasks.	**336 809 € incl. VAT** (278 355 € excl. VAT): • Physics Lot 1: 143 990 €; • Physics Lot 2: 143 990 €; • A1-C2 AI Testing: 29 040 €; • Task Digitization: 19 790 €.
5.	**Public Procurement Office of Lithuania (VPT)** - National Knowledge Examination and Certification Information System VAS (Contract No. 11F-35)	High-availability national examination, item-bank management, automated grading, appeal handling, and digital certification platform (SaaS / Web) integrated with national e-government gateways.	**296 450 € incl. VAT** (245 000 € excl. VAT)

No.	Client / Platform and Project	Technical Scope, Scale (Users / Standards) and AI Capabilities	Scale / Contract Value
6.	**Central Purchasing Body of Lithuania (VšĮ CPO LT)** - National Public Procurement Management System PVIS (Tender No. 9487126, Winner 2026-11)	Multi-tenant public procurement planning, initiation, workflow approval, QES/ADOC signing, analytics data cube, and national SABIS / CVP IS / VPT SSO integration platform for 1 300+ users across Lithuanian contracting authorities.	**199 529 € incl. VAT** bid (Framework ceiling: **363 000 € incl. VAT** / 300 000 € excl. VAT)
7.	**Lithuanian Post (AB Lietuvos paštas)** - Enterprise Information System Development and Digital Selection Platform	High-reliability state-owned enterprise information system, workflow automation, and digital candidate assessment platform.	**181 500 € incl. VAT** (150 000 € excl. VAT)
8.	**Vilnius City Municipal Housing (SĮ „Vilniaus miesto būstas“)** - Customer and Process Management System CRM (Contract No. 5.28-26/40)	Municipal enterprise CRM, automated inquiry routing, document management, and analytics platform.	**60 500 € incl. VAT** (50 000 € excl. VAT)
9.	**Kalvarija Gymnasium & Dubysa School** - Student Achievement and Behavioral Risk Early-Warning System (TŪM, Contract No. VPS2025-24, Certificate No. D3-212)	Production deployment of an early-warning and pedagogical intervention engine based on the ABC (Attendance, Behavior, Coursework) methodology and MTSS Tier 1-3 framework, integrated with the National Student Register and „Mano dienynas“ e-diary.	**30 250 € incl. VAT** (25 000 € excl. VAT, Completed 2026-04-09)
10.	**RS Trading Ventures LLC (USA)** - High-Performance AI / ML and Generative AI Agentic Analytics Platform (Contract No. 20250721/1, Certificates No. 20251219/06 and No. 20260728/RS-DATA-01)	Autonomous deep learning (PyTorch, TensorFlow, Scikit-learn) and Generative AI / LLM agentic system for real-time time-series stream analytics, risk modeling, and high-throughput ETL / ELT feature pipelines.	**60 000 € excl. VAT** (Completed 2025-2026)

3. Proposed Role and Work Package Contributions in the Consortium

We are ready to serve as **Work Package 3 Technical Leader** (or Co-Leader) and **Work Package 5 National Pilot Leader in Lithuania**, or to **initiate/co-coordinate a consortium** built around our pre-

drafted 45-page Part B technical proposal **„EDU-AI-BRIDGE“** (indicative Lump Sum budget module for Bright Projects: 450 000 € to 665 000 € across 36 months at 100 % RIA funding):

Work Package and Role	Technical and Research Tasks Delivered by Bright Projects	Key Deliverables and Outcomes
WP3 (Technical Lead): Trustworthy AI Learning Environment, Multimodal xAPI / QTI 3.0 Engine and Teacher Co-Pilot	1) Privacy-by-design multimodal ingestion pipeline (QTI 3.0, xAPI micro-interactions, digitized handwriting and reading fluency) with SHA-256 pseudonymization at the school edge; 2) Training and calibration of „SAINT+“ Knowledge Tracing and „Risk Fusion“ early skill-gap diagnostic models for reading, maths, and science; 3) Human-in-the-Loop Teacher Co-Pilot with local SHAP XAI explanations automating formative feedback and administrative reporting; 4) Algorithmic Fairness and EU AI Act Annex III conformity toolkit.	Interoperable, EU AI Act-compliant AI platform and Teacher Co-Pilot validated in live classrooms (TRL 6-7), reducing teacher administrative workload by at least 35 %.
WP4 (Technical Co-Lead): Interactive Reading, Mathematics and STEM Digital Modules	Digitization and adaptation of interactive reading, language, mathematics, and virtual science / physics inquiry labs in QTI 3.0 / HTML5 format with WCAG 2.1 AA accessibility for students with disabilities (SEN).	Multilingual open-standard QTI 3.0 and xAPI interactive item bank and virtual STEM lab suite.
WP5 (Lithuanian Pilot Lead): 2-Year Longitudinal Classroom Trial (cRCT)	Technical deployment, e-diary integration („Mano dienynas“, „Emokykla“), and operational coordination of a 2-year longitudinal experimental cohort across 12-15 Lithuanian schools (800+ formal K-12 pupils).	High-frequency longitudinal learning analytics dataset and empirical impact evidence from Lithuania.

4. Key Research and Engineering Personnel

Name and Role in Project	Qualifications and Relevant Track Record
Mindaugas Samulionis - Principal AI Systems Architect & Lead AI Researcher (WP3 Technical Lead)	Principal Architect of „EduPredict AI Engine“, Bright Projects AI Process Automation R&D Lab, and NŠA „Kalbėkime Lietuvai“ AI assessment modules; leads hybrid Knowledge Tracing („SAINT+“), SHAP Explainable AI, and EU AI Act Annex III compliance engineering.
Linas Kiguolis - Chief Systems Architect & Senior EdTech Engineer	10+ years of experience architecting the ExoClass club administration platform (~25 000 registered children, 30 000+ parents), Robotics Academy's internal systems (10 000+ active students), VPT VAS (296 450 €), NŠA Physics Platform (287 980 €), IMS QTI 2.2 / 3.0 and xAPI LRS pipelines, and national school SSO / e-diary integrations.
Aidas Berūkštis - Principal MLOps and Cloud / HPC Architect	20+ years in high-availability distributed systems, Kubernetes / Docker MLOps, GPU cluster training, and GDPR / ISO 27001 cybersecurity architecture.
Norbertas Drazdauskas - Digital Curriculum & Interactive QTI / STEM Content Lead	Technical Delivery Lead for the NŠA Digital Physics Platform (PPS-388, 287 980 €) and NŠA Lithuanian Language Testing System (KL1-10); leads interactive QTI 3.0 / STEM lab adaptation and school living-lab onboarding.
Ieva Aldakauskaitė - Managing Director, AI Ethics, GDPR & EU AI Act Compliance Lead	Managing Director of MB „Šviesūs projektai“; leads GDPR / EU AI Act Annex III regulatory compliance, algorithmic fairness verification, data protection impact assessments (DPIA), and school living-lab agreements.
Ugnius Vaidila - Senior Data Engineer and Learning Analytics Specialist	High-throughput ETL / ELT pipelines, SHA-256 edge pseudonymization, psychometric validation, and automated algorithmic fairness („Demographic Parity“, „Equalized Odds“) testing.

Contact for inquiries: **Mindaugas Samulionis**, MB „Šviesūs projektai“ - mindaugas@sviesusprojektai.lt.