

Capability Statement

THEAIPLUSPLUS LTD — AI automation, software engineering and geospatial systems delivered by one registered company.

THEAIPLUSPLUS LTD

The AI++ (AI & software engineering) · TerraNexa Maps (geospatial)

COMPANY NUMBER

17397374

REGISTERED

England and Wales

REGISTERED OFFICE

82a, James Carter Road, Mildenhall, United Kingdom, IP28 7DE

THEAIPLUSPLUS LTD is a UK-registered technology company with two trading divisions: The AI++, an AI automation and software engineering practice, and TerraNexa Maps, its geospatial division. Both divisions are the same legal entity, so a client contracts with one company for AI, software and geospatial scope rather than assembling and coordinating several suppliers.

Core competencies

AI automation & agentic systems

Custom AI applications, LLM copilots, agentic workflow automation, RAG and enterprise search, evaluation harnesses and guardrails. Production systems with observability, not pilots.

Custom software engineering

Bespoke web applications, enterprise databases and internal tooling engineered from scratch around a business process, including transactional products with subscription billing and background automation.

3D WebGIS & digital twins

Photoreal and schematic 3D scenes in the browser over real terrain, 3D tiles and live feeds. Cesium, deck.gl and MapLibre, built for operators rather than for demonstrations.

Spatial databases & analysis pipelines

PostgreSQL/PostGIS schema design, indexing and migrations; ETL and tiling for vector, raster and point-cloud data; reproducible scheduled analysis with monitored runs.

Remote sensing & live data integration

Sentinel and Landsat ingestion, cloud masking and derived indices; SAR; AIS, SCADA, telemetry, IoT and weather feed fusion onto one reconciled timeline and coordinate frame.

Spatio-temporal network analytics

Constrained-flow and graph models over networks — distribution grids, maritime corridors, pipelines, transit lines — simulated forward with time as a first-class dimension.

Operational picture (GEV)

One continuously updated view of a whole site or network: digital twin, live telemetry, sensor feeds and asset register resolved onto the same coordinates and clock, with a drill-down path from network view to single asset.

Delivery, security & handover

Containerised deployment, infrastructure-as-code, least-privilege access, secrets held server-side and hardened deployment. Source, schemas and documentation handed over on delivery.

What sets us apart

- ✓ One registered counterparty for AI, software and geospatial scope — THEAIPLUSPLUS LTD, company number 17397374, registered in England and Wales.
- ✓ Eleven geospatial systems deployed and publicly openable — the portfolio claim is verifiable, not referential.
- ✓ One shared spatio-temporal engine, so entering a new sector is modelling work rather than a platform rebuild.
- ✓ A UK-registered company with a single registered office and a single point of accountability for delivery.

- ✓ Built to be handed over: source, schemas, infrastructure-as-code and documentation on delivery.
- ✓ Deployable on client infrastructure, including private and on-premises environments.

Past performance

- ✓ ClarityGrid — substation-to-home power flow across a complete radial distribution network in photoreal 3D Lower Manhattan: 73 links, 55 metered customers, live consumption per building over the daily load cycle.
- ✓ Maritime Corridor Risk & Routing — live AIS vessel flows through nine global choke points, with corridor-closure simulation on a 72-hour horizon and reroute pricing per vessel.
- ✓ Cold Chain Integrity — predictive cross-border cold chain monitoring across nine jurisdictions on a 48-hour horizon.
- ✓ Climate Event Cascade Predictor — second- and third-order supply network failure propagation from a single climate event.
- ✓ Water Grid Leakage & Hydraulics — national water distribution grid modelled hydraulically, with leakage localisation.
- ✓ Market Node Congestion Heatmapper and Storage Revenue Backtest — wholesale power market congestion by pricing node, and historical revenue backtesting for grid-scale battery storage against ERCOT market data.
- ✓ 5G Congestion Indexer, 4D Air Traffic Coordination, Megacity Transit Optimisation and Crop Health & Regional Stress — four further deployed spatio-temporal systems across telecoms, airspace, public transport and agriculture.
- ✓ AI and software portfolio — AI Restaurant OS (restaurant operating system), AI Calling Agent, Security++ IT (autonomous cyber defence), Gemstones++ and SUFIXA.
- ✓ CashPilot — deployed full-stack SaaS with subscription billing, background automation and an AI assistant, demonstrating transactional product delivery beyond mapping.

Technical stack

- ✓ 3D & GPU: CesiumJS, deck.gl, MapLibre GL, Mapbox GL, Three.js, Google Photorealistic 3D Tiles
- ✓ GIS platforms: ArcGIS (JS API, Pro, Enterprise), QGIS, GRASS GIS
- ✓ 2D web mapping: Leaflet, OpenLayers
- ✓ Spatial data: PostgreSQL + PostGIS, GeoServer, GDAL/OGR, PDAL, rasterio, GeoPandas, DuckDB Spatial, GeoParquet, PMTiles, STAC

- ✓ Earth observation: Sentinel-2, Landsat, Google Earth Engine, SAR
- ✓ AI & data: LLM applications, agentic frameworks, RAG and vector search, evaluation harnesses, MLOps pipelines
- ✓ Engineering: React, TypeScript, Node.js, Python, FastAPI, Docker, Kubernetes, Terraform, GitHub Actions, AWS/Azure/GCP, Nginx

Engagement models

Subcontracted work package

A defined scope delivered against your specification, schedule and acceptance criteria, reporting into your programme structure. Fixed scope and milestones priced against your bill of quantities, under your client-facing brand where required.

Consortium or joint-venture partner

We join the bid as technical partner — method statement, architecture and defensible effort estimates — and stay through execution to deliver what we helped specify. Continuity from bid team to delivery team.

Direct programme delivery

You are the utility, authority or operator and you need the system built. We scope, build, deploy and hand over, with your team involved from the first week so the handover is a formality rather than a project.

Technical capability augmentation

Embedded senior capability for a specific phase — a prototype to de-risk an approval gate, a performance problem, or a pipeline that has to be rebuilt — with documented handover and a supported transition.

Procurement answers

LEGAL NAME

THEAIPLUSPLUS LTD

TRADING NAMES

The AI++ · TerraNexa Maps

COMPANY NUMBER

17397374

JURISDICTION

Registered in England and Wales

REGISTERED OFFICE

82a, James Carter Road, Mildenhall, United Kingdom,
IP28 7DE

CONTRACTING ENTITY

THEAIPLUSPLUS LTD — one contract, one invoice, one
point of accountability

INVOICING CURRENCIES

USD, GBP or EUR

WORKING HOURS OVERLAP

Daily overlap with US, UK, EU and Gulf business hours

SECURITY

Least-privilege access, secrets held server-side,
hardened deployment

HANDOVER

Source, schemas, infrastructure-as-code and
documentation on delivery

Contact

info@theaiplusplus.com

+1 (934) 203-2612

www.theaiplusplus.comwww.terranexamaps.com

Enquiries are answered within one business day. Procurement documents, pre-qualification questionnaires and vendor onboarding packs are completed on request.

TerraNexa Maps (TerraNexa Intelligence) is the geospatial division of THEAIPLUSPLUS LTD, a company registered in England and Wales with company number 17397374. Contracts and invoices are issued by THEAIPLUSPLUS LTD. Registered office: 82a, James Carter Road, Mildenhall, United Kingdom, IP28 7DE.