

Theodoros Mangas

Software Engineer (Python) · Geospatial Domain Specialist

Komotini, Greece | Open to relocation across EU / UK · Remote-friendly

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PROFESSIONAL SUMMARY

Full-stack engineer specializing in Python/Django backends - REST APIs, async task queues, caching, and Linux production deployments - with the front-end range to ship complete products solo. Comfortable day to day with Django REST Framework, Celery and Redis for offloading long-running jobs, and performance-tuning PostgreSQL and MySQL, plus JavaScript/Leaflet front-ends when a project needs them. A background in GIS and geospatial data adds an edge for engineering and public-sector work, on top of a foundation of clean, well-tested, production-grade code. Currently building a GeoDjango/PostGIS SaaS platform for surveyors, and looking to bring that backend depth into a collaborative engineering team.

CORE SKILLS

Backend	Python · Django · Django REST Framework · FastAPI · REST API design · Celery · Redis
Databases	PostgreSQL · MySQL · PostGIS · indexing · query tuning · ORM optimization
Architecture	OOP · SOLID principles · modular design · API versioning · design patterns
Auth & Security	JWT · session auth · RBAC · permissions · secure file handling
DevOps	Linux · Docker · Gunicorn · Nginx · Git · CI/CD · logging & monitoring
Testing	pytest · unittest · defensive programming · validation layers
GIS & Spatial	GeoDjango · GDAL · PostGIS · QGIS · GeoJSON · KMZ · DXF · spatial data pipelines
Frontend	JavaScript · AJAX · HTML/CSS · Bootstrap · Leaflet.js

NOTABLE PROJECTS

HandyTools - Modular SaaS Platform for Surveyors

Active build

Python · Django · Django REST Framework · PostgreSQL · GeoDjango · PostGIS · Redis · Celery · Gunicorn · Nginx

- Designed an extensible modular backend (multi-tenant, built for rapid feature additions) with a shared validation layer and standardised export pipelines (DXF / KMZ / GeoJSON) reused across 5+ utilities
- Built a Celery + Redis async task queue to offload long-running spatial jobs from the request cycle, keeping the API responsive under load.
- GeoDjango/PostGIS backend handling coordinate transformations, traverse calculations, and geospatial format conversion.

CityCare - Volunteer Operations & Live City Map

Ready for deployment

Django · Python · MySQL · DRF · Leaflet · JavaScript

- Real-time multi-team coordination: role-based workflows let multiple volunteer teams record incidents and field tasks in the same geographic space without conflict.
- Location-linked records surfaced on a live operational map for situational awareness across teams.

Engineering Technical Office - Client Platform

Deployed in production

Django · Python · DRF · MySQL · Ajax · GeoDjango · Leaflet · JavaScript

- Production full-stack platform with dynamic service pages, secure customer management, multilingual content (Greek/English), and georeferenced project showcases via an integrated Leaflet.js map.

EXPERIENCE

Python/Django Engineer

Self-Employed (Freelance) · 2021 – Present · Remote

- Designed and built production Django backends and REST APIs for client platforms and internal tooling.
- Implemented secure bulk-file ingestion pipelines with multi-layer validation, reliably processing 10k+ records per run from unreliable input data.
- Cut average query time on large datasets through ORM tuning and targeted PostgreSQL/MySQL indexing.
- Integrated Redis caching and Celery task queues to decouple long-running jobs from the request cycle, and built reusable Python modules for data processing and automation that eliminated repetitive manual workflows.
- Maintained Linux production deployments (Gunicorn + Nginx): configuration management, log analysis, and zero-downtime releases.

Land Surveyor & GIS Analyst

Independent Practice · 2014 – Present · Greece

- Automated spatial data processing and validation with Python scripting, replacing slow manual workflows on large-scale mapping datasets and GIS deliverables for engineering and cadastral submissions.
- Built deep expertise in coordinate geometry (COGO), traverse calculations, and georeferenced pipelines - domain knowledge that now drives backend design decisions in my software work.
- Worked with industry-standard formats (DXF, GeoJSON, KMZ, Shapefiles) and tooling (QGIS, GDAL) across real client projects.

EDUCATION & CERTIFICATION

B.Sc. Surveying & Geoinformatics Engineering - TEI of Central Macedonia, Greece · 2013

Advanced Python Developer Certificate - PeopleCert · 2022

LANGUAGES

Greek (Native) · English (Fluent)