# **Kyrillos Samer Mousa**

Front-End Developer (React.js, Next.js) with GIS Expertise

Phone: (+20) 1275389201 | Email: kyrillossamer770@gmail.com | Address: Elzatoon,

Cairo, Egypt

**LinkedIn:** linkedin.com/in/kyrillos-samer-82b862263 | **GitHub:** 

github.com/KyrillosSamer | Portfolio: kyrillossamer.github.io/myPortfolio/

## **Professional Summary**

Creative and technically skilled Front-End Developer with a strong foundation in modern JavaScript frameworks (React.js, Next.js) and a specialization in geospatial web applications. Proven ability to design dynamic, user-focused interfaces for complex GIS platforms, integrating real-time spatial data with advanced filtering, symbology, and user interactivity. Combines solid UI/UX development with geospatial expertise to create powerful and intuitive mapping tools for both military and civilian environments.

#### **Education**

Cairo University | Faculty of Arts – GIS, Remote Sensing, Surveying | 2019 – 2023 Grade: Very Good | Graduation Project: Geo-Marketing Analytics – Grade: Excellent

## **Professional Experience**

GIS Front-End Developer - Military Survey Administration | 2024 - Present

- Developed GIS-based web applications using React.js, Leaflet, and OpenLayers.
- Built interactive dashboards using M.App Enterprise.
- Designed and implemented a full-featured web portal for military land management with coordinate picking, shapefile uploading, WMS/WFS integration, measurement tools, and filtering capabilities.
- Worked with PostgreSQL and GeoServer for backend geospatial data management.
- Maintained high performance and security standards for all military apps.

Data Collector - Ministry of Transport | March 2024

- Collected and processed spatial data for national infrastructure and urban planning initiatives.

### Freelance GIS Specialist

- Developed GIS tools and dashboards including hydrology, network analysis, topology mapping, and contour digitizing for Al-Arish.
- Built custom web applications with dynamic data visualization and reporting features (Excel, PDF).

## **Highlighted Projects**

- Buffer Zone Map Application: Enabled users to interact with data inside customizable buffer areas. Supported radius control, transparency, zoom, and Excel export.
- Spatial Filter & Thematic Mapping: Allowed users to filter map data by date, entity, or ownership. Symbology visualization, table display, and export to PDF included.
- Military Land Management Portal: Created a powerful OpenLayers-based platform for public access. Features include drawing tools, coordinate display, shapefile uploads, WFS/WMS layer integration, measuring tools, and dynamic filtering.
- Ministry Dashboards: Built interactive M.App Enterprise dashboards for government decision-making and analysis.

#### **Technical Skills**

Web Development:

- HTML, CSS, SCSS, Tailwind CSS, JavaScript, TypeScript, React.js, Redux, Next.js
- OpenLayers.js, Leaflet.js, Responsive UI Design, Component-based Architecture, REST API Integration
- Python, C++, OOP, Algorithms, Data Structures, Design Patterns

#### **GIS & Remote Sensing:**

- ArcGIS Desktop/Pro/Online, QGIS, ERDAS Imagine, ENVI, GeoMedia, M.App Enterprise
- Hydrology, Topology, Contour Digitizing, Network Analysis

#### Databases:

- PostgreSQL, MS SQL Server, SQLite, MS Access
- SQL Queries, ER Diagrams, RDBMS

## **Internships**

**EDGE Pro for Information Systems** 

- Worked with ERDAS Imagine and GeoMedia for image classification and spatial data processing.

National Authority for Remote Sensing and Space Sciences

- Project: Monitoring Urban Changes in Kafr Shukr, Qalyubia.
- Achievement: Won 2nd place in GIS & RS Surveying Program (2022).

#### **Courses & Certifications**

- CS50 & CS50x Introduction to Computer Science (Harvard)
- Self-Study: C++ Basics, Algorithms, Data Structures, OOP, Design Patterns
- Front-End Development (Route Academy): HTML, CSS, JavaScript, Tailwind, React, Redux, Next.js

- Python Programming (ITI Mahara Tech)
- Database Fundamentals, PostgreSQL, MS SQL Server (ITI Mahara Tech)

## Languages

Arabic: Native

English: Intermediate (B2)