NIKOLAOS BAKOGIANNIS

GIS Developer

With an M.Sc. in Geomatics from ETH Zurich and experience as a Scientific Assistant at ZHAW, I have developed a solid foundation in geospatial analysis and data management. As a GIS Developer at Crosswind GmbH, I led ETL processes and managed data pipelines, ensuring data integrity and optimizing workflows for geospatial databases. Using Python (arcpy, geopandas, GDAL/OGR, Folium) alongside GIS tools like QGIS and ArcGIS Pro, I delivered customized solutions that supported clients in making data-driven decisions.

Following this role, I completed a Full Stack Web Development bootcamp, expanding my technical skills with Ruby on Rails, JavaScript, HTML, and CSS. This experience has strengthened my ability to create fully responsive applications, allowing me to deliver comprehensive and integrated geospatial solutions.

🎓 EDUCATION

Le Wagon
09.2024 | 07.2024
Coding Bootcamp, Web Development   📍 Online

Full-Stack Development

Eidgenössische Technische Hochschule Zürich (ETH Zürich)
2018 | 2016
Master's degree, Geomatic Engineering   📍 Zurich, Switzerland

Thesis: Cartographic visualization for indoor semantic wayfinding

Athens University of Economic and Business (AUEB)
2014 | 2012
Master in Business Administration (MBA)   📍 Athens, Greece

National Technical University of Athens (NTUA)
2010 | 2005
Diploma in Rural and Surveying Engineering. School of Rural and Surveying Engineering (SRSE)
(5 years studies equivalent to Master 300 ECTS)
📍 Athens, Greece

💼 PROFESSIONAL EXPERIENCE

GIS Developer
07.2024 | 09.2022
Crosswind GmbH   📍 Winterthur, Switzerland
- Responsible for transitioning company's major working pipelines from FME to Python
- Participating in projects for clients, such as MünichRE, Swisscom, Sunrise, BKW
- Responsible for the further development of company's Data Model and Structure

CONTACT INFO

✉ n.bakogiannis@outlook.com

🐙 Github

🌐 My Website

📞 +41766731345

For more information, please contact me via email.

SKILLS

Experienced in programming and scripting for spatial analysis

Full experience in cartography and geovisualisation.

Highly skilled in R, SQL, PostgreSQL, Python, HTML, JavaScript, CSS, Ruby on Rails, React, FME, ArcGISpro (ESRI), QGIS, Git

English: Proficient/Fluent

German: Advanced (C1 Niveau Goethe Institute)

08.2022 | 07.2019

Scientific Assistant

Geoinformatics Research Group, Zurich University of Applied Sciences (ZHAW)

📍 Wädenswil, Switzerland

Member in projects:

- Monitoring Sihlhölzlipark
- Bikeability in Schweizer Städten und deren Agglomeration unter dem Einfluss der e-Mobilität Teaching Experience
- Cultural Mapping 4.0 – Innovative Wege zur Stärkung der kulturellen Identität der Bodenseeregion
- FIT with Markdown (unlocking the potential of the publication language R-Markdown for data-oriented teaching)

07.2019 | 05.2019

Software Engineer

Flury AG

📍 Lenzburg, Switzerland

Member of the geomatic engineering team

04.2019 | 10.2018

Software Engineer, Intern

Leica Geosystems AG 📍 St. Gallen (Heerbrugg), Switzerland

Work for project BLK3D in the software engineering team of Disto Vertical Department

- Support the release of new Leica BLK3D products and mobile/desktop applications
- Stereo processing using Semi-Global Matching
- Optimize feature detection and feature matching for Multishot
- Support camera calibration, accuracy evaluation and unit/integration test

2016 | 2011

Freelance Geomatic Engineer

Freelancing 📍 Athens, Greece

- Working as a freelance Geomatic Engineer
- Preparing topographic and photogrammetric surveys for private and public sector
- Recording registrable rights for cadastral surveys at the region of Attiki
- Working as a freelance engineer in construction engineering company Eurocyfield

2013 | 2011

Assistant Project Manager

Eurasian Partners 📍 Athens, Greece

- Participation in content design for print and electronic major media in Greece
- Support in organizing international conferences and academic events
- Responsible for establishing and maintaining software programs

2011 | 2010

Geomatic Engineer

AKTOR (Member of ELLAKTOR Group) 📍 Athens, Greece

- Project: Construction of new railway association of Port Ikonio

TEACHING EXPERIENCE

2022 | 2019
Geographic Information System (GIS)
Teaching assistant of the introductory course to GIS (BSc in Environment and Natural Resources)
📍 Wädenswil, Switzerland

2022 | 2019
Angewandte Geoinformatik (Applied geoinformatics)
Teaching assistant of the advanced course in GIS (BSc in Environment and Natural Resources)
📍 Wädenswil, Switzerland

2022 | 2019
Patterns & Trends in Environmental Data – Computational Movement Analysis
Teaching assistant (MSc in Environment and Natural Resources)
📍 Wädenswil, Switzerland

SELECTED PUBLICATIONS AND POSTERS

2023
Uncertainty analysis of geodata derived from digital map processing
International Journal of Geographical Information Science · May 15, 2023
Cyrill Delfgou, **Bakogiannis, N.**, Patrick Laube

2019
Cartographic Visualization for Indoor Semantic Wayfinding. Multimodal Technologies and Interaction
Multimodal Technologies and Interaction, 3(1), 22.
Bakogiannis, N., Gkonos, C., & Hurni, L.

2018
A Public Gaze-Controlled Campus Map. In Eye Tracking for Spatial Research
Proceedings of the 3rd International Workshop. ETH Zurich.
📍 Zurich, Switzerland
Göbel, F., **Bakogiannis, N.**, Henggeler, K., Tschümperlin, R., Xu, Y., Kiefer, P., & Raubal, M.