1989, Vietnamese

RELATED SKILLS

Technical Architecture Planning

Stakeholder Coordination

Product & System Development

Geospatial Systems Management

Digital Transformation Strategy

Risk Management

Team Leadership & Cross-functional Collaboration

TECH SKILLS

***Geospatial Platforms**: WebGIS, Spatial Data Infrastructure*

***Visualization**: Web 2D, 3D Viewer*

***Cloud & Systems**: VPS Administration, Distributed Data Processing*

***Development**: Fullstack & DevOps*

CONTACT

Hanoi

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MINH HIEU NGUYEN, PhD

Geospatial Systems Platform | Technical Architecture Planning

Technical Architecture Planning and Geospatial Engineer with 10+ years of experience in spatial data platforms, WebGIS systems, and digital infrastructure projects.

PhD in Civil & Environmental Engineering from Yonsei University with strong expertise in managing complex R&D and software development projects involving WebGIS, big spatial data processing, and 3D visualization systems.

Skilled in bridging technical teams, business stakeholders, and domain experts to deliver scalable digital infrastructure solutions.

EDUCATION

✓ **Doctor`s degree** in Civil and Environmental
Yonsei University, Republic of Korea ***2016 - 2023***

✓ **Master's degree** in GIS and Environmental
Hanoi University of Mining and Geology, Vietnam ***2014 - 2015***

✓ **Engineer`s degree** in Surveying and Mapping
Hanoi University of Mining and Geology, Vietnam ***2007 - 2012***

WORK HISTORY

- **Private Company - South Korea**

2024 - 2026

R & D Engineer (senior)
Managed system architecture, development, and deployment strategy for spatial data platforms supporting construction inspection and infrastructure monitoring.

- **Yonsei University - South Korea**

2016 - 2023

Ph.D. Researcher

Led multiple R&D projects focused on digital transformation in construction, agriculture, forestry, transportation, and real estate sectors.

Coordinated software engineers, researchers, government agencies, and private companies in building spatial big data processing systems.

- **Vietnam Academy of Science and Technology - Vietnam**

2014 - 2016

GIS Developer

Developed WebGIS systems for territorial management and crop monitoring using remote sensing data.

Coordinated technical implementation with domain experts and data analysts. Delivered spatial data platforms for government stakeholders.

- **Eposi Technology Development JSC - Vietnam**

2012 - 2013

Data Engineer

Contributed to the development of vehicle tracking data systems.

Processed and analyzed spatial data collected from GPS tracking devices.

PROJECT DEVELOPMENT

No.	Title	Period	Role	Organization	Year
1.	App development for safety inspection	2 years	Technical Project Manager	Uwon Structural Diagnostic Architectural Office Co., Ltd, South Korea	2024~2026
2.	3D data/rendering engine for high-performance scalable server operation and massive 3D data rendering	1 year	R & D	Conworth Inc, Seoul, South Korea	2022~2023
3.	System development of land information system (LIS) for real estate business in Dak Lak, Vietnam	6 months	Technical Project Manager	Cao Nguyen Tech Investment Company Limited	2020
4.	Web development for monitoring and warning marine environment in Khanh Hoa and Ca Mau	3 months	Main Developer	HCM City Institute of Resource Geography	2021
5.	Web development for the management and investigation of apartment deterioration.	1 year	Technical Project Manager	Uwon Structural Diagnostic Architectural Office Co., Ltd, South Korea	2018
6.	Web development for crop monitoring in Uganda using massive remote sensing data	4 months	Main Developer	Vietnam National University of Agriculture	2018
7.	Framework development for handling massive point clouds from construction sites	6 years	R & D	Yonsei University & Hyundai Construction in South Korea	2017~2023
8.	Web development for crop monitoring in Korea using massive remote sensing data.	2 years	Main Developer	Yonsei University & Ministry of Agriculture of South Korea	2016~2017
9.	Web development for territorial management in Cao Bang province	2 years	Main Developer	Vietnam Academy of Science and Technology	2014~2015

JOURNAL PUBLICATION

No.	Title	Author	Journal	Year
1.	An efficient data-driven method to construct dynamic service areas from large-scale taxi location data	**1st**	Journal of Intelligent Transportation Systems. (In Press, Corrected Proof)	2023
2.	Spatiotemporal calibration of Camera-LiDAR using Nonlinear Angular Constraints on multiplanar Target	Co-author	IEEE Sensors Journal, Vol.22, No.11, pp. 10995 - 11005. (SCIE)	2022
3.	B-EagleV: Visualization of big Point Cloud datasets in Civil Engineering using a distributed computing solution	**1st**	Journal of Computing in Civil Engineering, Vol.36, No.3, 04022005. (SCIE)	2022
4.	An efficient data structure approach for BIM-to-Point-Cloud change detection using Modifiable Nested Octree	Co-author	Automation in Construction, Vol.132, pp.103922 (SCIE)	2021
5.	A fast solution for publishing web map service from massive remote sensing data	**1st**	Journal of Science: Natural Sciences and Technology (2018), ISSN: 1859-3100 (Vietnam), 15(11), 193-200	2018
6.	The design of Web-based crop information system using open-source framework and remote sensing data	**1st**	Korean Journal of Remote Sensing, (2017): 751-762	2017
7.	A benchmark test of spatial big data processing tools and a MapReduce application	**1st**	Korean Society of Surveying, Geodesy, Photogrammetry and Cartography, (2017): 405-414.	2017
8.	Development of a WebGIS system for territorial management in Cao Bang, Vietnam	**1st**	Journal of Resources and Environment. No 7, April, 2015	2015

CONFERENCE PUBLICATION

No.	Title	Author	Proceeding/Conference	Year
1.	A demonstration of B-EagleV: Visualizing massive point cloud directly from HDFS	**1st**	In 2019 IEEE International Conference on Big Data (Big Data) (pp. 4121-4124). IEEE. Los Angeles, CA, USA	2019
2.	Massive Point Cloud Processing on Hadoop: challenges and proposed solution	**1st**	In Proceedings of the 40th Asian Conference on Remote Sensing. Daejeon, Korea.	2019
3.	Development of massive Point Cloud Data geoprocessing framework for construction site monitoring	**1st**	In Computing in Civil Engineering 2019: Data, Sensing, and Analytics (pp. 185-192). ASCE. Atlanta, Georgia	2019
4.	Development of a visualization tool for student characterization using mobility data	**1st**	In Companion Proceedings of the 9th International Conference on Learning Analytics & Knowledge (pp. 175-176). ACM. Tempe, Arizona, USA	2019
5.	Implementation of floating population data for smart cities: A case study in Songdo Incheon South Korea	Co-author	Proceedings of the 2nd ACM SIGSPATIAL Workshop on Prediction of Human Mobility. ACM, Seattle, USA	2018
6.	Spatio-temporal factor analysis of characterizing mass protest events using Taxi trajectory in Seoul, Korea	Co-author	Proceedings of the 1st ACM SIGSPATIAL Workshop on Analytics for Local Events and News, ACM, Los Angeles, USA	2017
7.	Web-based crop information system for South Korea using time-series data from remote sensing	**1st**	In Proceedings of the International Symposium on Remote Sensing 2017, Nagoya, Japan	2017
8.	Spectral discrimination of common mangrove species in Ca Mau peninsula, Vietnam: Using a large sample set of hyperspectral in-situ canopy data	Co-author	GIS Conference 2015, Hanoi, Vietnam	2015
9.	Demonstration of a WebGIS system for territorial management in Cao Bang, Vietnam	**1st**	GIS Conference 2014, Can Tho, Vietnam	2014

Thank you for reading!