YU WANG

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EDUCATION

Unversity of Glasgow *Glasgow, United Kingdom*
PhD in Geospatial Data Science *2022 – 2025*
ESIEE-Paris (École supérieure d'ingénieurs en électrotechnique et électronique) *Paris, France*
Diplome d'Ingenieur eq. M.Sc. of Telecommunication, Score: 14.9/20 *2012 – 2014*
Harbin Institute of Technology *Harbin, China*
BEng Telecommunication Engineering *2007 – 2011*

RESEARCH EXPERIENCE

University of Glasgow Feb. 2025 – Present
Geospatial Artificial Intelligence Research Scientist *United Kingdom*

- Supported the Consultancy AI project for the automation of the legal documents review process through an AI-enpowered platform.
- Developed LLM- and RAG-based tools for extracting, reviewing, and revising legal clauses to enhance efficiency and consistency in contract analysis.

DSO–Alan Turing Institute Apr. 2024 – Oct. 2024
Research Assistant *United Kingdom*

- Conducted location extraction from visual information for geospatial AI applications.
- Curated a global street-view image dataset, ensuring geographic diversity and consistency.

University of Glasgow Jan. 2022 – Present
PhD Candidate in Geospatial Data Science *United Kingdom*

- Conducted proof-of-concept research on 3D urban modelling from cellular mobile signals, demonstrating the feasibility of opportunistic wireless sensing in the context.
- Designed and implemented a prototype mobile app for real-world data collection, enabling 3D city modelling through cellular mobile signals and bridging geospatial sensing and mobile computing in an interdisciplinary framework.
- Investigated temporal bias in street-view images and its implications for state-of-the-art cross-view geolocalisation models, contributing to improved fairness and robustness in geospatial AI applications.
- Advanced human activity recognition using Ultra-Wideband (UWB) channel impulse response snapshots by benchmarking eleven classical and deep learning architectures.
- Identified and quantified key factors contributing to pedestrian disorientation in urban wayfinding through a mixed-methods study in Greater London, informing human-centric urban design and navigation services.

WORK EXPERIENCE

Bouygues Telecom Aug. 2017 – Jan. 2021
IP Network Performance Engineer *France*

- Led network capacity planning by developing network load growth forecasting models to project 3–5-year demand trends and optimise future network expansion strategies.
- Directed network performance analysis within the "Network Redesigning" project (since 2019), providing technical assessments and optimisation recommendations.

- Oversaw the departmental initiative “Automation of Weekly/Monthly KPI Reports”, coordinating with network architecture and IT teams to ensure alignment with project objectives.
- Delivered monthly QoE/QoS performance reports for mobile, FTTH, and ADSL services, including data visualisation, analytical insights, and technical findings for departmental presentations.
- Managed infrastructure material resources by monitoring utilisation and prioritising allocation to meet operational needs.

Davidson Consulting Nov. 2014 – Aug. 2017
Research Engineer *France*

- Developed a network performance monitoring and usage-tracking framework to optimise decision-making and support continuous QoS improvement across long-term infrastructure projects.
- Collaborated with network deployment and implementation teams to manage upgrade lifecycles, from initial demand assessment to final rollout and performance validation.

Bouygues Telecom, Internship Apr. 2014 – Oct. 2014
Optical & Microwave Engineer *France*

- Conducted analysis and optimisation of capacity resources for microwave transmission links as part of a long-haul network performance project.
- Designed and implemented a simulation tool to support decision-making in replacing STM-1 channels with Ethernet links in the Fujitsu FRX-3 long-haul microwave radio system.

JOURNAL AND CONFERENCE PUBLICATIONS

- Wang, Y., & Basiri, A. (2025). Bit to brick: from cellular mobile signals to 3D city map creation. *Big Earth Data*, 1–25.
- Wang, Y., & Basiri, A. (2024). Advancing human activity recognition using ultra-wideband channel impulse response snapshots. In *2024 International Conference on Activity and Behavior Computing (ABC)* (pp. 1-10). IEEE.
- Wang, Y., Basiri, A., Gerrits, P., Solomon, G., Woelk, S., & Fidel Pereira, M., Why do pedestrians get lost? A case study of personal, situational, and environmental factors in Greater London. *Journal of Location Based Services.* (Manuscript under review).
- Wang, Y., & Basiri, A., From static to dynamic: evaluating model robustness with historical street view images in cross-view geolocalisation. *IEEE Access* (Manuscript under review).

AWARDS

- Excellent paper award (Top 2) - International Conference on Activity and Behavior Computing — Japan, 2024
- Winner of the outstanding international graduates of ESIEE-Paris (sole recipient) — France, 2014

TECHNICAL SKILLS

- **Languages & Frameworks**: Python, MATLAB, Kotlin, computer vision, Tensorflow, PyTorch
- **Data analysis & visualisation**: Tableau, SAP Business Intelligence
- **Telecommunications**: Trasmission networks, QoS, network performance, capacity planning

LICENSES & CERTIFICATIONS

- **Coursera Specialisations**: Machine Learning (DeepLearning.AI), Deep Learning (DeepLearning.AI & Stanford Online), Python (University of Michigan).
- **Coursera Short Courses**: Data Science Math Skills (Duke University), Matrix Methods (University of Minnesota).

LANGUAGES

- English (fluent)
- French (fluent)
- Mandarin (native)