Margarita Smoldareva
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Highly motivated and experienced ecologist with a passion for advancing technology to assist with conservation and sustainable practices. Leveraging over nine years of experience in ecological research and analysis, I have honed a deep understanding of ecosystem dynamics and enhancing biodiversity. Committed to reducing carbon footprint, I proudly own a hybrid vehicle, aligning personal values with professional ethos. Currently, I operate remotely through my own ecological consultancy, offering specialised services to support ecological and biodiversity enhancement and management. Thriving in the dynamic realm of freelancing, I excel in project management, data analysis, and client relations. Equipment used to deliver ecological projects: DJI Air2s Drone, Sony IR camera x2, various bat detector.

EXPERIENCE

INDEPENDENT ECOLOGIST
T/A Bee.Wise.Eco– London, UK
Sep 2021 – On-Going
Operating under the name Bee.Wise.Eco, I am an independent ecologist dedicated to providing comprehensive ecological support for clients undertaking small to medium-scale, residential and commercial developments. From initial assessments to final implementation, my business offers tailored solutions to ensure ecological sustainability and regulatory compliance throughout the project lifecycle. Additionally, I am actively engaged in further developing an IoT device aimed at lowering the cost of real-time bat and bird classification to aid with biodiversity net gain post development monitoring requirements. By combining my ecological expertise with technological innovation, I strive to create an accessible tool to enhance biodiversity monitoring and conservation efforts in an increasingly interconnected world.

ECOLOGIST
Buro Happold Ltd – London, UK
Sep 2023 - Jan 2024
Employed as an ecologist within the esteemed Buro Happold London team, my responsibilities encompassed diverse tasks vital to ecological management. Engaged in regular site visits, I conducted comprehensive assessments while utilising GIS software to create maps. My role also involved meticulous report writing, synthesizing findings to inform decision-making processes. Additionally, I spearheaded initiatives aimed at biodiversity enhancements, aligning with organisational goals of ecological sustainability. Regrettably, due to non-disclosure agreements, specific project details cannot be disclosed. However, I can attest to my unwavering dedication and the invaluable experiences gained during my tenure with Buro Happold.

ECOLOGIST
Mott MacDonald Ltd – London, UK
May 2022 – July 2023
At Mott MacDonald, I specialised in detailed design for High Speed 2 (HS2) assets, contributing to the development of critical infrastructure projects. Collaborating closely with diverse design disciplines, I ensured the integration of biodiversity principles into project plans. By leveraging my expertise, I facilitated the delivery of biodiversity-stable solutions that harmonised with ecological objectives. Through effective communication and teamwork, I fostered a collaborative environment, promoting sustainable practices across the project lifecycle. My role underscored a commitment to environmental stewardship, through delivering planting palettes, checking for clash detections and ecological enhancements to encourage sustainable large-scale infrastructure development.

ECOLOGIST
Middlemarch Environmental Ltd
March 2014 - September 2021
During my tenure at Middlemarch Environmental, I undertook a wide array of ecological surveys, encompassing various species including bats, reptiles, great crested newts, dormouse, and badgers, along with extensive Ecological Clerk of Works (EcOW). Through meticulous fieldwork and data collection, I provided valuable insights into the presence and distribution of protected species, informing planning requirements.

EDUCATION
MSc Connected Environments (part-time)
University College London
Completed September 2023
The MSc Connected Environments program at UCL offered modules covering IoT fundamentals, urban informatics, data analytics, sustainable built environments, cybersecurity, and advanced topics. During my studies I learnt about sensor networks, smart cities, data analysis, energy efficiency, interface design, and cybersecurity measures. The curriculum emphasizes real-world applications and addresses challenges in securing IoT devices and data privacy. Through a blend of theory and practical exercises, I gained expertise in creating environmentally sustainable infrastructure and improving urban environments using technology. Modules are designed to provide a comprehensive understanding of connected environments, enabling students to tackle complex issues at the intersection of technology, urban planning, and sustainability.

My thesis focused on deploying machine learning algorithm BatDetect2 (previously developed by UCL) to classify UK bat species in real-time utilising Raspberry Pi and various sensors. Through extensive experimentation, I tested the algorithm capable of accurately identifying bat species based on their acoustic signatures beyond urban habitat, providing crucial ecological insights. The culmination of this research was the creation of a Flutter application that seamlessly integrated real-time environmental data with identified bat species, offering a user-friendly interface for researchers and enthusiasts alike. This innovative solution not only advances the field of biodiversity monitoring but also facilitates broader public engagement and awareness of conservation efforts.

Post-graduate diploma in Landscape Ecology with Geographical Information Science (GIS)
University of Greenwich
Completed in June 2015

BSc Landscape Management (Land Use)
University of Greenwich
Completed in June 2013

Licences and Accreditations

- QGIS and LandAPP
- UAV operator (A2 CofC certified and insured)
- CSCS card (valid until June 2024)
- Natural England Level 1 bat and great crested newt holder
- Associate member at Landscape Institute, Institute of Environment Management and Assessment (IEMA) and Institute of Engineering and Technology (IET)
- Qualifying member Chartered Institute of Ecology and Environmental Management (upgrade to full in progress)
- Outdoor First Aid Trained
- CPD