

Dear Colleagues,

Please join us for a **hybrid** seminar by Dr. Bayes Ahmed at GSFC in B33, RE108.

Date: Thursday June 20th, 2024

Time: 2:45pm EST

Location: Hybrid-GSFC Building 33, Room E108

GESTAR II SEMINAR SERIES



Dr. Bayes Ahmed
University College London (UCL)

Biography:

Dr Bayes Ahmed is an Associate Professor at the Institute for Risk and Disaster Reduction at University College London (UCL). His research expertise spans disaster risk reduction, multi-hazard risk assessment, climate change adaptation, social vulnerability assessment, geospatial data science, and climate mobility. Bayes specialises in the intersection of conflict and

Leveraging Geospatial Technologies for Disaster Risk Reduction in Bangladesh

Abstract: Bangladesh, characterized by its vulnerability to a variety of hydrometeorological hazards, including floods, landslides, cyclones, and droughts, presents a critical context for the application of advanced geospatial technologies. This presentation will explore the integration of geospatial data and technologies in enhancing disaster risk reduction (DRR) strategies within Bangladesh. By examining case studies and current practices in monitoring and managing these hazards, the discussion will highlight how satellite data, remote sensing, and geographic information systems (GIS) have transformed hazard analysis, risk assessment, and emergency response strategies.

The talk will delve into specific instances where geospatial technologies have successfully

disaster, with a vision to improve the quality of life of displaced persons and stateless populations. He is driven by a passion for collaborating with frontline communities, aiming to understand their challenges comprehensively and develop actionable policy recommendations to meet their specific needs.

Bayes has notably developed Bangladesh's first web-based forecasting system for rainfall-induced landslides, which has been officially adopted by the Bangladesh Meteorological Department. This system represents a milestone in regional disaster risk management, reflecting his commitment to practical and innovative solutions for at-risk communities. His accolades include Google's Geo for Good Impact Award in 2023 and ICIMOD's ICT for Mountain Development Award in 2015, which commend his contributions to landslide risk reduction and his strategic use of technology in environmental science.

Bayes has earned a PhD in Disaster Risk Reduction from UCL, a joint Master of Science degree in Geospatial Technologies from universities in Spain, Germany, and Portugal, and a Bachelor of Urban and Regional Planning degree from the Bangladesh University of Engineering and Technology (BUET). He also actively contributes to academic literature as an Editorial Board Member of the International Journal of Disaster Risk Reduction.

mitigated disaster risks and will discuss the collaborative DRR efforts already in place, including those with local agencies and international bodies. Looking to the future, the presentation will identify persistent challenges that hinder the full potential of geospatial solutions in DRR, such as data inaccessibility, lack of technical expertise, and infrastructural limitations.

Moreover, the presentation will propose new avenues for collaboration, emphasizing the need for innovative climate change adaptation measures that integrate geospatial technologies. These collaborations could focus on enhancing data sharing agreements, co-developing web-based early warning systems, and fostering capacity building in data analytics among local researchers and practitioners. By fortifying partnerships and leveraging cutting-edge technologies and expertise, there is significant potential to advance the resilience of Bangladesh to hydrometeorological threats and to model similar collaborations globally. This dialogue aims to showcase past successes and also to pave the way for future joint ventures that align with both disaster risk reduction and climate change adaptation goals.



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