College | Management Unit:	UCD College of Engineering and Architecture
School | Unit:	UCD School of Civil Engineering
Post Title & Subject Area *(if relevant)*	Research Assistant
Project:	Sediment mobility and seabed disturbance geo-spatial toolbox development (Sed-mob-bed Tool)
Post Duration:	7 Months Full-time or Part time 0.7FTE
Line Manager	Shauna Creane
Competition Ref. Nº	017794
HR Administrator	Qiong Zhang

Position Summary:

We seek a Research Assistant to join the marine geoscience and engineering research team at UCD.

This role is an exciting opportunity for a computer science, engineering or geoscience (or similar) graduate to work on the development of a sediment mobility and seabed disturbance geo-spatial toolbox (Sed-mob-bed Tool), a timesaving, reliable and repeatable means of qualifying and quantifying sediment mobility for a range of sediment types. This novel Sed-mob-bed Tool will facilitate the interrogation of spatial oceanographic and sedimentological datasets to produce a set of standardised sediment mobility and seabed disturbance indices applicable to international end-users.

This Research Assistant will be part of an interdisciplinary team bringing together expertise in coastal processes, oceanography, sediment dynamics, spatial modelling and computer science to address the objectives of this project. The RA will contribute to all areas of the project but will primarily focus on key computer programming tasks for tool development.

This position is either a full-time role or a part-time role (0.7FTE). Duration will possibly be longer for a part-time role.

Principal Duties and Responsibilities:

- Carry out research duties as directed by and under supervision of the Principal Investigator.

- Engage in appropriate training and professional development opportunities as required by your Principal Investigator.

- Engage in the dissemination of the results of the research in which you are engaged as directed by and with the support of and under the supervision of your Principal Investigator.

Salary: €31,962 - €32,782 Per Annum (Pro-rata for Part-time post)

Appointment on the above range will be dependent on qualifications and experience

Details on eligibility to compete and pension information is available at
https://www.ucd.ie/hr/resourcing/eligibilitytocompete/

Selection Criteria

Selection criteria outline the qualifications, skills, knowledge and/or experience that the successful candidate would need to demonstrate for successful discharge of the responsibilities of the post. Applications will be assessed on the basis of how well candidates satisfy these criteria.

Mandatory:

- A third level degree in Computer Science, Engineering, Geoscience or a related discipline (Second Class Honours Degree or higher).
- A demonstrated ability to conduct literature reviews and synthesise scientific content.
- Experience with python-scripting, including packages such as python site package 'ArcPy', and python libraries 'SciPy' and 'NumPy'.
- Experience using ArcGIS Pro, ArcGIS Online and QGIS to create geospatial data solutions and conduct spatial analysis.
- Knowledge of or experience in implementing geospatial data management standards.
- Advanced numeracy and analytical skills for data manipulation and management.
- A demonstrated team player.
- Excellent interpersonal and communication skills (oral, written, presentation etc.).
- Candidates must demonstrate an awareness of equality, diversity and inclusion agenda.

Desirable:

- MSc in a relevant area.
- Willingness to participate in outreach activities to disseminate the results of the project.

Supplementary information:

The University:	https://www.ucd.ie/
UCD Strategy 2020-2024: Rising to the Future	https://strategy.ucd.ie/
The College/Management Unit:	https://www.ucd.ie/eacollege/
The School/Programme Office/Unit:	https://www.ucd.ie/civileng/
Equality Diversity and Inclusion at UCD	https://www.ucd.ie/workatucd/diversity/

Informal Enquiries ONLY to:

Please note this section is optional. Applications will be addressed to an assigned HR administrator.

Name:	Dr Shauna Creane
Title:	Dr
Email address:	shauna.creane@ucd.ie