ASPIRE AWARDS

University of Southampton

Some previous winning projects

Hybrid Rocket Space Flight

A project to send a rocket, designed and built by students, into space. The award helped to scale up the bench test model to the full 4000N rocket necessary to reach space. The project aimed to prove that by using a mix of readily available and 3D parts printed using the University's EDMC, it is possible to send a low-cost rocket into orbit.

The project hoped to inspire local school pupils to take part in STEM activities as part of the wider outreach programme already operating within the University's Spaceflight Society.

Interactive Model for Data Visualisation in VR

A project to develop a VR system for displaying multiple variable data as 3-dimensional solids.

By using this system to display the three major categories of search-engine optimisation over time, it would be easy for a web developer to see at a glance what areas need to be worked on to improve the ranking of their site. This versatile model can also be used for education and training purposes.

The award was to pay for hardware required to create the software that in turn can make the theoretical system a practical reality.

Welsh Language Work Experience in Patagonia

To take part in the British Council run Welsh Language Project in the Patagonia region of Argentina, where there is a small multilingual (Welsh and Spanish speaking) Welsh community.

In this project, Welsh-speaking participants teach in a classroom setting, helping ensure that Welsh is still being used and continues to thrive in the community.

Mental Health Volunteering Abroad

This project was a 4-week mental health placement and included training, exploring, developing and gaining an insight into global mental health.

This opportunity helped individuals with mental health problems and learning disabilities of all ages.

The various activities included projects in psychiatric facilities, makeshift classrooms in temples with people of all ages and different backgrounds, and shadowing and learning from mental health professionals.

Tropical Marine Biology Research in the Galapagos Islands

Two weeks working at the internationally renowned Charles Darwin Research Station, carrying out independent research on marine iguanas. Their survival is threatened by human impact, and they are listed as vulnerable on the IUCN Red List.

The project involved monitoring invasive algae in Tortuga Bay. By understanding the algae's spread around the islands, effective control methods can be introduced to protect the native species.

As well as data analysis, report writing and a presentation. the trip also involved five days travelling, three days exploring, and a day of recreational scuba diving,

Aurora Borealis Investigation

A project that travelled to Norway to visit the Adoya Space Centre and Oslo Space Centre, guided by a researcher, to see their work first hand. The award winner also took part in education sessions on the Aurora Borealis and other astronomical topics. Four nights were spent viewing the Aurora first hand.

Find out more:
www.southampton.ac.uk/aspire

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Benthic Ecology Investigation

This project investigated how ecosystems on the sea floor influence the roughness of the sea floor surface, and therefore affect ocean flows and currents, which has implications for the protection of coastlines from erosion by marine ecosystems. It involved going to the Arctic to collect sediment samples, mapping lugworm beds with drones, and getting the samples to a flume facility in Quebec, Canada.

It gave a unique opportunity for the applicant to learn and experience cutting edge research to complement their studies, and to experience travelling and living in a different culture and environment.

Illustration of Community-Based Sustainability Actions

This project used reportage illustration to high-light the work of locally run community projects aiming to tackle climate change. The aim was to encourage others to think about sustainability within their own lives, as well as showcasing these particular solutions.

The project produced a book for the local charities to sell, and a mural for the community to enjoy.

Mars Rover

A group of students were the only British team, shortlisted from applications across the world, to compete at the prestigious University Rover Challenge, held at the Mars Desert Research Station in Utah, USA. This was an exciting opportunity to showcase the expertise, innovation, and talent of our students in an international arena.

The Aspire Award was made to help cover the cost of attending the event.

Conference Attendance

This Aspire Award winner had been invited to give a presentation of her research at the British Ecological Society annual conference, on the effects of artificial lighting and noise pollution on urban robin populations.

The award enabled her to attend and make the presentation. This in turn led to her being interviewed by the BBC, and receiving further subsequent academic invitations.

Sarugaku Masks

This project enabled travel to Japan to analyse and study Sarugaku and related masks within Japanese temples and institutions, consult with academics and performance practitioners, and to attend practical workshops in the Japanese performance art-forms of Kyogen and Noh – the descendants of Sarugaku.

This project studied Sarugaku masks of 8th-14th century Japan, adding to a database including aspects not normally measured by institutions (e.g. eye diameter, centre of gravity, fastening, and use wear) and so enabling a system of performance determination.

Immersion in Japanese culture also gave the award winner a greater depth of Japanese cultural understanding.

Social Work in Cape Town

The winner of this award worked alongside South African social workers for a period of 6 weeks in a children's home, supporting them with case studies. This student used the opportunity the award gave her to create a self-help group, one that continues to benefit vulnerable young women in Cape Town.

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