# Job Description – EPSRC DTP Internship: Trial development of a Pressure Pad to prevent bed sores

*“EPSRC’s Vacation Internships scheme gives undergraduate students a taster of what it is like to do research. The students are given practical, first-hand experience of working on and carrying out research in a UK university.”*

Source: [Internships and placements – UKRI](https://www.ukri.org/councils/epsrc/career-and-skills-development/studentships/flexibility-for-funders/internships-and-placements/)

To be eligible for an EPSRC Vacation Internship you **must**:

* be an undergraduate or Masters student in a STEM subject area.
* not have completed your degree studies before the planned end of the internship. An internship should generally take place in the summer vacation **before** your final year of study.
* have a right to work in the UK and carry out the placement whilst resident in the UK. We are **not** able to sponsor visas for the internship.

**About the Role**

With an early-stage prototype developed, we are looking for an enthusiastic individual to build momentum around either further development of the pressure pad prototype, or demonstration of its usefulness in the context of a hospital.

Depending on your interests and skill sets, you could help develop the prototype into a more robust design which is easy and cheap to produce; or help create the test images and data sets necessary to demonstrate the usefulness of the mat; or help run usability and functional tests of the mat with healthy volunteers; or build on the relationships in the hospital to understand the best mechanism for testing the prototype.

If you are interested in learning about research in the area of computer science, applied in a health context, this project would be an ideal fit.

The role will develop skills and experience in:

* Working in interdisciplinary teams and how to collaborate
* Academic communication, both written and spoken
* Coding and hardware development
* Experience in digital health environments

**About the Unit**

The School of Computing and Communication leads and shapes the digital revolution through delivering innovative and dynamic teaching that is relevant to the workplace, and is founded on world-class research and scholarship in computing and communications.

Our research covers diverse areas, from cybersecurity and software engineering, through to interaction design and machine learning. You can find out more about the research we do [here](https://www5.open.ac.uk/stem/computing-and-communications/research).

This project will be hosted as part of the [Digital Health Lab](https://www.open.ac.uk/blogs/DHL/), an interdisciplinary collection of researchers interested in using technology to support people’s health and wellbeing.

**Key Responsibilities**

Depending on the candidate’s interest, the project could focus in many areas. This will be agreed with the candidate at the start of the project. Potential areas of focus include:

* Working on the physical prototype, including working on the electronics
* Developing the code base for the prototype
* Creating test images for analysis
* Developing machine learning algorithms for evaluating test images
* Testing early prototypes
* Working with the hospital to understand the route to testing the pad.

**Skills and experience**

The chosen intern will require access to a computer/laptop, the Internet and Microsoft Office applications.

Depending on the candidate’s interest, at least one of the following is essential:

* Experience in programming
* Experience in electronics and hardware prototyping
* Experience in user testing
* Ability to communicate with diverse experts

Desirable:

* Strong written English skills
* A pro-active mindset

If you would like further details about the role before making an application, then please email stem-research-student-support@open.ac.uk quoting the reference number and job title.