Trustworthy Autonomous Systems
Early Career Researcher Awards 2023

Call for Applications
Deadline 31 May 2023

The UKRI Trustworthy Autonomous Systems (TAS) programme aims to build a collaborative ecosystem for the UK to enable the development of socially beneficial autonomous systems, trustworthy in principle and in practice. Led by the TAS Hub, the inaugural TAS Early Career Researcher (ECR) Awards have been initiated to celebrate outstanding contributions made by PhD students and postdoctoral researchers to any area of Trustworthy Autonomous Systems research in the last three years. Four awards of up to £5k are available.

The TAS programme drives multidisciplinary work structured around three Grand Challenges, which represent contexts of significant public concern and risk to potential economic and societal growth:
1.   To ensure TAS improve rather than harm our physical and mental wellbeing
2.   To ensure TAS safeguard rather than undermine our personal freedoms
3.   To ensure TAS benefit rather than damage our society and the economy.

Topics related to Trustworthy Autonomous Systems as defined by the TAS Hub include, but are not limited to, autonomous systems and:
•   Their robustness in dynamic and uncertain environments
•   The assurance of their design and operation through verification and validation processes
•   The confidence they inspire as they evolve their functionality
•   Their explainability, accountability, and understandability to a diverse set of users
•   Their defences against attacks on the systems, users, and the environment they are deployed in
•   Their governance and the regulation of their design and operation
•   The consideration of human values and ethics in their development and use

All applicants need to be registered as a PhD student or employed at a UK university or eligible research organisation but they do not need to have had direct involvement previously with any TAS Hub activities.

Award categories
We are seeking applications that demonstrate significant impact or potential impact in any of the following categories:

1.   **Knowledge Transfer**
2.   **Policy**
3.   **Responsible Research and Innovation (RRI)**
4.   **Public Engagement and Outreach**
5.   **Academic Research**

Applicants may apply for an award in more than one category within the same application.

Funding

Four awards of up to £5k are available. The administration and expenditure of the award will be managed via the award-holder's home institution. The funding may be spent on activities directly related to the awardee and their research, for example, conference attendance to present TAS-related work, training activities, placements or visits, hiring interns, and other research-related activities, subject to financial approval.

All award expenditure should be incurred between 1 Oct 2023 and 31 Jul 2024.

Eligibility

Applicants should:

- Be either a PhD student or an early stage postdoctoral researcher at any UK institution or eligible research organisation at the time of application
- Be engaged in research in Trustworthy Autonomous Systems
- Have made a significant contribution to one or more of the award categories in the past 3 years
- Have a letter of support from a relevant member of staff.

How to apply

Applicants should complete the ECR Awards Application form available on the TAS website including the following information:

o The Trustworthy Autonomous Systems topics that their work addresses
o Details of their achievements with evidence of impact or potential impact
o How Responsible Research and Innovation (RRI) was incorporated within their work
o A brief outline of how they intend to use the award
o A short CV (2 pages max)
o A letter of support from a relevant member of staff.

Application deadline: **12.00 pm, Wed 31 May 2023**

Applications are welcomed from across the UK research community. The TAS Hub's work and decision-making are underpinned by its Equality, Diversity and Inclusion principles. Applicants are encouraged to contact the TAS Hub directly to discuss any adjustments they may need to participate in the scheme.

Selection

Applications will be evaluated on the basis of the information provided in the application form by a panel of Trustworthy Autonomous Systems experts. The selection process will take into consideration:

- The alignment of the applicant's contribution with Trustworthy Autonomous Systems
- The significance of the impact or potential impact of their contribution
- Evidence of Responsible Research and Innovation
- The supporting statement
- The applicant's career stage
- The relevance of the proposed funding use

The awards will be announced in July 2023. Winners will be invited to receive their award at a forthcoming TAS event (to be confirmed).

Award Conditions

o   The value of each award will be determined by the selection panel, up to a maximum of £5k per award.
o   Award-holders will be required to provide further details about how they plan to spend the funding, which will be subject to financial approval.
o   Expenditure should be directly relevant to the award-holder's doctoral or postdoctoral work.
o   All expenditure must be completed by 31 July 2024.
o   Award-holders will be invited to participate in relevant TAS activities for Early Career Researchers.
o   Award-holders will provide a report at the end of the funding period summarising the use and impact of the award.

Guidance for applicants

Any data you supply in your application will be used by the TAS Hub for the purposes of the administration and promotion of this award.

Email	Please provide your institutional email as a contact email.
CV	Include a brief CV (2 pages maximum), detailing your career to date.
Letter of support	This should be from a person who can comment on the achievements described in the application, e.g. a PhD supervisor, Project PI or line manager. The supporting statement may either be a signed letter on headed paper or an email from their institutional email address.
Award category	You may select more than one category in the same application. You will need to provide evidence to demonstrate your achievements in each category you select.
TAS theme	Select one or more Grand Challenges and provide three keywords/phrases to indicate the main topics of your research.
Summary	A brief overview that summarises what you achieved in each award category that you are applying for.
Achievements	Provide full details of the TAS-related activities that you wish to be taken into consideration for each award category you select, including the key aims, actions, and outputs.
RRI	The TAS Hub is committed to ensuring [Responsible Research and Innovation](#) is central to all research activities. Briefly describe the RRI challenges, how you embedded RRI in your work, and any tools and frameworks you used.
Impact	Describe the impact and/or potential impact of your achievements. As evidence, you may wish to include links to recent publications, blogs, policy briefs, citations, metrics or other examples that demonstrate the contribution of your work to TAS.
Use of Award	Provide a general indication of how you would use the award funding for personal development or professional activities with approximate costings (if available). If you are successful, we will ask you to provide a more detailed breakdown.

Contact

For any queries about the scheme please contact Alison Tebbutt, TAS Skills Manager (A.M.Tebbutt@soton.ac.uk).