TSI — TRANSPORT AND TELECOMMUNICATION INSTITUTE

TSI is a modern dynamic technical university of applied sciences, providing high quality education with focus on applied research.

- **Our Vision** – To be the leading private technical University in the Baltic Sea region.
- **Our Mission** – To create and disseminate knowledge and make a positive difference to our community and the wider Baltic Sea region.
- **Our Values** – Ambition, Excellence, Equity, Social and Environmental responsibility, Openness

We are looking for
PhD within European Innovative Training Network D-CODE: Machine learning methods for sustainable design futures

Teaser:
Challenge: Limited applicability of machine learning methods to novel settings
Change: Machine learning methods suitable for ambitious design problems
Impact: Increase synergy between human and machine intelligence

Job description:
You will be part of a European network of 15 PhD projects on cutting-edge, postdisciplinary research aiming to form the next generation of researchers and leaders capable of anticipating and responsibly guiding the digital transformation of society towards inclusive and sustainable futures, see www.dcode-network.eu.

This particular project is about developing machine learning methods suitable for design tasks in which human needs and values are driving forces, instead of the typical focus on efficiency and optimisation. In this project you will investigate what machine learning metrics are most apt for guiding these tasks and for navigating the associated design trade-offs (e.g., between accuracy and fairness).

The PhD will be working at the Data Analytics and Artificial Intelligence research cluster of Transport and Telecommunication Institute, under the supervision of prof. Neil Rubens and the co-supervision of Dr. Nazli Cila (Delft University of Technology, Netherlands) . Being part of the D-CODE network offers unique possibilities for training: dedicated summer/winter schools for all PhD candidates in which training will be delivered by renowned academics and practitioners; participation in "prototeams", e.g., teams of PhD candidates with different disciplinary backgrounds who will engage with the real world to ethically develop and iteratively prototype future technologies, design roles and practices; exchanges abroad for training and collaboration with others partners; a wealth of resources for European training and collaboration.

Key Responsibilities:
● Managing and carrying out your own research project;
● Working across disciplines and sectors in collaboration with other PhDs within the D-CODE network;
● Participating in the research and training activities within the D-CODE network;
● Attending progress and management meetings as required, and networking with the other research groups;
● Writing articles for scientific peer-reviewed venues;
● Writing progress reports and prepare results for publication and dissemination via journals, presentations and the web;
● Disseminating your research in the scientific community (international conferences) and non-scientific community, by outreach and public engagement.

Job requirements:
● A EU Master's degree (or equivalent) in a relevant field, i.e. Artificial Intelligence, Machine Learning, Software Engineering, Human-Data/AI Interaction, Human-Computer Interaction, Interaction Design, Human-Centered Computing;
● Broad knowledge of leading machine learning algorithms and a good knowledge of leading programming languages used in the AI field such as Python (preferred), Java, etc, Web UI (e.g. JavaScript, TypeScript, C#; and JS Frameworks (e.g. Blazor, Vue, etc.);
● Experience applying ML to text, numeric and image data;

If you are inerested in this job opportunity,
please send your CV and cover letter in *english*
to pvad@tsi.lv until 14.02.2021

We thank all applicants for your interest,
however only shortlisted candidates will be contacted

🌐 www.tsi.lv   📷 TSI_university

f TSIpage   ▶ TSIRiga

in Transport and Telecommunication Institute - TSI

● Ability to conduct and deliver high quality research both independently and as part of an interdisciplinary team;
● A passion for improving people's lives through better design and a demonstrable interest in the role of technology in society;
● Excellent communication skills in English, both in written and oral;
● Strong interest in working with designers and in the field of transportation/logistics/telematics;
● Meet the eligibility criteria below.

Eligibility Criteria:
D-CODE is funded by the European Commission's Marie Skłodowska-Curie programme and to be eligible for this funding you must meet the following criteria:
● You must not already hold a PhD and have less than four years of research experience since you gained the degree that qualifies you for this post, that is, a EU master's degree (MSc, MA or MFA degree) or equivalent (BA or BSc degree 1st class or 2:1 equivalent);
● You must not have resided or carried out your main activity (work, studies, etc.) in the selected country for more than 12 months in the 3 years immediately prior to your recruitment;
● You must work on the project full-time.
Please ensure that this information is clear on your CV. Researchers can be of any nationality.

Mobility Criteria:
D-CODE is funded by the European Commission's Marie Skłodowska-Curie programme and ESRs are expected to be embedded and engage for two to four months at other organizations in the consortium as part of placements and prototeam assignments, before returning to complete their PhD in their respective institutes.

COVID-19
The COVID-19 pandemic is causing major disruptions for many researchers, projects and organisations, including those working with EU funding. In agreement with the European Commission, D-CoDE may adopt a flexible approach to how mobility rules are applied, including remote working and online collaboration until the situation has stabilised and travel and relocation become feasible.

If you are inerested in this job opportunity,
please send your CV and cover letter in *english*
to pvad@tsi.lv until 14.02.2021

We thank all applicants for your interest,
however only shortlisted candidates will be contacted

🌐 www.tsi.lv   📷 TSI_university

f TSIpage   ▶ TSIRiga

in Transport and Telecommunication Institute - TSI

Conditions of employment / Salary and Terms:

The MSCA programme offers highly competitive and attractive salary and working conditions. The successful candidates will receive a (gross) salary in accordance with the MSCA regulations for Early Stage Researchers** comprising of living allowance of 2000 €/month, additional mobility allowance, and family allowance (depending on family status). The approximate gross salary stated above is subject to employer's statutory deductions and the amount varies according to the living costs of the host country. Exact salary will be confirmed upon appointment.

In addition to their individual salaries, all fellows will benefit from support from the hosting organization for secondments, training modules and active participation in workshops and conferences. Visa costs and tuition fees are eligible.

Application procedure:

The application deadline is February 14th. You are allowed to apply for multiple positions but you are required to indicate this in the cover letter and indicate priority.

Applicants should submit:

● A cover letter explaining your personal motivation in pursuing a PhD as part of D-CODE, including how you see the PhD fitting into your career trajectory;
● A CV, which should include details of your eligibility (degree and residency);
● A research statement outlining what questions would you be interested in pursuing within the scope of the PhD, and how would you go about addressing those questions (3 to 5 pages);
● Diploma and transcripts of records (BSc and MSc);
● Contact details of 1-3 professional references;
● A sample of writing, e.g., master thesis, scientific publications, professional or popular science writing;
● Other information for consideration, e.g. design portfolio, artworks, patents, professional media content (if any).

Selected candidates will be invited for interviews. Online interviews will take place in the weeks of March 1-12, 2021 (first round) and March 22-26, 2021 (second round).

By submitting their CV, the candidate affirms the processing of his/her personal data according to the Personal Data Protection Law.

If you are inerested in this job opportunity,
please send your CV and cover letter in *english*
to pvad@tsi.lv until 14.02.2021

We thank all applicants for your interest,
however only shortlisted candidates will be contacted

🌐 www.tsi.lv   📷 TSI_university

f TSIpage   ▶ TSIRiga

in Transport and Telecommunication Institute - TSI