

R&D Research Opportunities Archive

2023

Market research and UX for future social media scheduling software development for agencies

To design a data strategy that helps to understand and communicate the value in audio brand assets

Model of the future energy system with no fossil fuels

Research into the impact of a new home learning environment (HLE) toolkit for families and early years learning providers

2022

Gas diffusion layer: create improved machinery with faster production speed and reduced cost and engineered layers by better understanding the 'holy grail' of the gas diffusion layer

Scoping project to inform the later development of a sustainability module for the client's existing platform aimed at the fashion and apparel sector

Develop moulding for hemp-crete plant pot

Scoping project to inform the later development of a sustainability module for the client's existing platform aimed at the fashion and apparel sector

R&D software development support to improve a cutting-edge augmented reality clothing system proof concept solution that has been developed

Eco-jump rope development

Research project to provide scientific evidence that muscle stiffness can be a source of chronic pain

An eco-friendly semi-permanent just fit solution for garments

Digital audio announcement procurement and production portal

Interactive socio-economic platform for medical professionals and patients

Development of an automated digital EMDR therapy platform

Calculate the energy and carbon savings achieved using installed Thermocill in a range of settings

Airflow aerodynamic kinetic magnetic rotation sealed vacuum cased simulations

Immersive 3D environment: consumer and health centre

AquaBagg: a system which converts gravity/tidal variation/water flow into air flow to power wind turbines and generate electricity

2021

R&D support to determine a method to locate construction activity in the vicinity of critical national infrastructure

An investigation into the use of graphene and conductive inks, with IoT devices in smart urinary catheterisation monitoring

Evaluation project to assess the impacts on users of accessing a digital fiction therapy service, cohort to be evaluated: care leavers

Exploring methods of human-AI co-creativity that leads to more effective advertising and exploring ways to augment the creative process for creating commercial video adverts

Augmented reality mobile app development / enhancement that allows users to try on clothes virtually and supports sustainability

Quantifying carbon footprint savings from the use of new fibre pails versus plastic pails

Formulation chemist / new product formulator for wellbeing products development

Research the training and products provided by the company that are positively impacting the lives of families having an individual with hidden disabilities (autism, ADHD, down syndrome, learning disabilities) in order to properly understand why the impact happens and what is the positive financial benefit to local authorities

Electric vehicle simulation tool

In-vehicle supplementary battery technology development

Recovering lithium from recycled batteries

Increasing user's engagement and activity levels on a digital performance support platform designed for the renewable energy sector

An AI adaptive learning app that automates the creation and curation of personalised learning materials on mass

Shelf life testing for a new innovative plant-based substitute for uncultured cottage cheese

Chemical formulation project for decontaminating a wide scope of inorganic and organic deposits

Novel AI algorithm development

Development of automated vision cutting technology, to cut up used garments, avoiding seams, fastener, embellishments

Insights dashboard for eye tracking and feedback

System integration to integrate multiple devices and data format seamlessly

2020

Industry analysis and research to identify future innovation trends within the construction sector to inform the companies innovation strategy

White paper co-creation: leadership training research and analysis (current and future)



Seeking expertise in Data Science, AI & Machine Learning to identify trends and talent in professional sports coaching and performance, to support the development of talent tracking software

Developing an app with a functionality of two-way communication, transfer of documents, facial recognition, chat bot, open-banking in order to streamline the conveyancing process

Environmental impact assessment and comparison of aluminium versus mild steel in the manufacture of architectural products for the construction sector

Research into transparent photo voltaic (PV) window attachment technologies

Learning platform for ex-Service personnel

Investigating the use of graphene and conductive inks, with IoT devices in urinary catheterisation monitoring

An eco-friendly semi-permanent just-fit solution for garments

Chemical formulation project for decontaminating a wide scope of inorganic and organic deposits

To design and perform a study, collate the data and publish a paper quantifying the unnecessary cost to the NHS due to the over-use of thickener in drinks for people with dysphagia

University or RTO support to design, prototype and test the integration of flexible electronics onto/ into natural fibres, such as wool and cellulose for smart-textile applications, including wearables and interior furnishings

Develop the user approach to lifestyle (online) data gathering technology, design and delivery of the protocols

Prevention of scale formation of steel bar during induction heating process

Innovative start-up seeks the support of a university to test and refine their patented flood defence product, taking into consideration design-for-manufacture, material selection and routes to market

Additive manufacturing of bone staple made of nitinol alloy

2019

Support in researching and developing a portable auralisation tool

Design, development and modification of a currently available hand crank power bank

Research into how to electroplate a 'hot' nuclear canister closure

Research into a new generation of rechargeable lithium battery powered, autonomous, programmable, robotic machines, capable of meeting the same criteria as conventional models

Research into live streaming technology and platforms to provide a comparable broadcast quality product

Evaluating state of the art and emerging machine learning algorithms

Development of monitoring software to enable the collection of ground temperature data from ground source heat pumps

Research to investigate the risk posed by bacterias, virus and fungus present on cosmetic brushes



Research support relating to substitution reaction trials to determine the relevant experimental conditions

Research and analyse a commercial heat recovery system that recovers the high temperature waste heat from commercial cooking equipment

Feasibility study into the development of a knowledge platform

Validation and proof of concept for an analytical platform

Feasibility study for the development of an app to detect the type of plastic in packaging and the ability for that user to recycle the product

Technical research, design and engineering expertise to optimise a hydropower system

Development of a quantitative data capture dashboard

Research study to reduce damage to business and domestic dwellings caused by flash flooding

