connected everything.

Newsletter: Issue 16, Winter 2023

Introduction

We hope the year 2023 is treating you well so far! Since our extension, we are pleased to announce that we have been able to fund a healthy number of fantastic feasibility studies this year, which are now well underway. We are excited to witness the progress of each study. We are truly grateful to all our network members, who have helped to shape and mould such a premium network and to also continue to be somewhat of a support hub for all, especially for early career researchers.

In this newsletter, we will be giving you a flavour of what is to come during this year but do keep an eye out as we will have a few more exciting announcements in the next coming months. Make sure to check out our social media outlets for regular news and updates!

Thank you for your continued support and participation in the network.
We're looking forward to seeing what brilliant things we will achieve this year!

Contents

- Feasibility Studies
- 2050 Digital World Report Published
- Early Career Researchers Mentor Programme
- Connected Everything Webinar Series
- Current publications by network members

Please click on the links given throughout the newsletter for further details.

Feasibility Studies

Connected Everything II most recent, and final, funding call has finished with six projects being funded. The studies have time frames of between 6 and 12 months. The project teams are multi-disciplinary and include one or more industry partners. Further details of these studies are available at feasibility studies.

Feasibility Study Information Sheets

University of Newcastle - *Design and Manufacture of Novel 3D Printed Electrodes*

University of York - *Demonstrating Resource and Energy Efficiency through Data-driven Smart Food Manufacturing Processes*

University of Nottingham - *DOMINOES: aDaptive human-rObot teaMINg fOr rEmote taskS*

University of Liverpool - *IMPRESS – reInventing Manufacturing via Products with REconfigurable Shape and Stiffness*

University of Nottingham - *Digital manufacturing of metal oxide nanocomposites via interpretable machine learning models*

London South Bank University - *Adaptive biocomposite 3D printing based on industrial robotics*

Support and guidance
For all the details regarding our feasibility studies please go to our website - https://connectedeverything.ac.uk/feasibility-studies/. This will also give you examples of the 20 feasibility studies funded previously.

Contact information
Though our funding call is now closed, if you have any questions regarding the application process in general, please contact the Connected Everything Network Manager, Sarah Afriyie at email: sarah.afriyie@nottingham.ac.uk

To access information on our previous feasibility studies; their publications, demonstrators and lessons learned are captured within their end of project summaries. These can all be accessed on our website - https://connectedeverything.ac.uk/feasibility-studies/

Digital World 2050 Report Published

During the past 2 years Connected Everything with it's members has been developing our thought piece around Digital World 2050. We have worked with over 50 Connected Everything members and external stakeholders to develop the report and create a set of recommendations. We are pleased to announce that the 2050 report has finally been published! We would like to thank of all our CE members and stakeholders who attended the roundtable discussions, for all your contributions, effort and support.

Key areas covered in the report are:

- Industrial Digital Technologies in 2050
- Digitisation and The Manufacturing Workforce of the Future
- Digital Support for Achieving Net Zero Manufacturing by 2050
- Digitally Enabled Manufacturing Resilience

From these four cross-cutting areas, five main recommendations emerged:

1. Connect digital technology developers to manufacturers.
2. Reduce digital manufacturing knowledge barriers.
3. Consolidate digital manufacturing guidance.
4. Support employee wellbeing during transition
5. Transparency of value chain data

Further recommendations also emerged from our roundtable discussions.

To view the full report, please click here.

The University of Nottingham and the University of Exeter have kindly issued press releases for the report.

To view the University of Nottingham's press release, please click here.

To view the University of Exeter's press release, please click here.

Early career researcher mentor programme

Due to the huge success and positive feedback of our pilot mentoring programme, we will be continuing with the programme this year as Connected Everything would like to provide as much support to Early Career Researchers as possible. We envisage that within the Connected

Everything network we can match mentees to mentors for a period of 6 - 12 months. Please complete the form found here to request a mentor. It will take about 10 minutes to fill out. The information you provide will be used only by Connected Everything to register you onto a mentoring matching database, and then for the mentor to mentee matching purposes.

Listen here to hear one of ours Podcasts with John Oyekan, University of Sheffield, mastermind of the scheme to learn more about its benefits.

Connected Everything Webinar Series

Connected Everything II will be launching a webinar series that creates a platform for all to showcase research, projects, news and provides a space to network. We would like to invite team members from current and previous feasibility studies to present their research, which is not limited to just within their FS project – but all things manufacturing. We would also like to invite our industry partners to present current projects and to also provide advice and support to individuals in their early stages of their careers. Webinars will be 30 minutes each, 20 minutes to present and a 10-minute Q&A session. If you would like to get involved, please contact sarah.afriyie@nottingham.ac.uk.

Publications

As a result of over 6 years funding, our members have now created a wealth of publications to help advance digital manufacturing research. The current list of 30+ publications can be found on the website - https://connectedeverything.ac.uk/publications

Join Connected Everything at connectedeverything.ac.uk

- Visit our website to sign up to the network

- Find out about forthcoming events and activities

- Let us know what would be useful to you

- Promote your event through Connected Everything

- Interact with members through our LinkedIn group

- Watch (or listen) to the huge range of films on our You Tube channel.

- Follow us on LinkedIn and Twitter - @ConnectedII