### Catapult Researcher in Residence (RiR) Programme: Opportunity Description

| Name of the Catapult(s) | Transport Systems Catapult (TSC)  
| Digital Catapult (DC) |
| Location(s) | Milton Keynes, London and/or DC’s local centres |
| Description of the Catapult(s) |  
| The Transport Systems Catapult is the UK’s innovation centre for Intelligent Mobility; harnessing new technologies to improve the movement of people and goods around the world. The Transport Systems Catapult focusses on mobility across (and between) all transport modes. It has three areas of strategic focus: Connected & Autonomous Transport, New Mobility Services, and Open Data Platform for Transport.  
Website: [https://ts.catapult.org.uk/](https://ts.catapult.org.uk/)  
Contact: Julia Brady ([julia.brady@ts.catapult.org.uk](mailto:julia.brady@ts.catapult.org.uk)) |  
| The Digital Catapult focusses on four main technology areas: Immersive Technologies (VR/AR/MR), Artificial Intelligence (AI/ML), Future Networks (IoT, 5G, LPWAN) and Future Focus (Cybersecurity, Distributed Ledgers, Blockchain and Smart Contracts). Key markets sectors for the Digital Catapult are the Creative Industries, and Digital Manufacturing.  
[https://www.digicatapult.org.uk/](https://www.digicatapult.org.uk/)  
Contact: Catarina Fernandes ([catarina.fernandes@digicatapult.org.uk](mailto:catarina.fernandes@digicatapult.org.uk)) |  
| Through this scheme we are looking for radical ideas for innovative research which brings together existing knowledge and expertise and has the potential to co-create something game-changing.  
**Please contact us to discuss your project idea before you submit your application to ensure your idea is within scope and offers the desired level of innovation, impact and challenge.** |
Digital and Transport Systems Catapult look for project ideas focusing on either blockchain, 5G or in measuring economic impact:

**Blockchain**, a new database technology, could help to increase collaboration, the sharing of trusted information and efficiency, reduce costs and risk, and forge new business models in the transport sphere over the coming years. The features that generate these proposed business benefits are: consensus, immutability, provenance, finality, a single version of the truth, customisable transparency and decentralisation. These features enable traceability and auditability, disintermediation and smart contracts which also contribute to the business benefits.

*Example (without being exhaustive)*
*Use of Blockchain technology to reduce the impact of Brexit on cross-channel supply chains (Or ‘Distributed Ledger Technology’)*

Government has a clear ambition for the UK to be a global leader in the next generation of mobile technology – **5G**. Good digital infrastructure is a building block of the Government’s modern Industrial Strategy - it creates new opportunities for growth by allowing business to be done on the move; unleashing dynamic business models; and opening up new opportunities and markets. It also supports us in our everyday lives - connecting us with friends, family and colleagues; helping us to stay safe; and giving us access to information and services that we increasingly take for granted. 5G promises a step-change in mobile connectivity with enormous potential to boost productivity and grow the economy, and we want the whole country to benefit. So, we will take a leading role in its development and roll-out, putting the UK at the forefront of the 5G revolution. ¹

*Example (without being exhaustive)*
*Connectivity in Autonomous Transport*

**Other area:**
Measuring Economic Impact in Disruptive Technologies relevant to the Transport Systems Catapult and Digital Catapult.

**Researcher Specification**
*Please refer to [EPSRC eligibility criteria](https://www.epsrc.ac.uk/)*

**Other Details**
*As in application guidelines*

**Closing Date for Applications**
17:00 (GMT) on 21 September 2018

¹ Next Generation Mobile Technologies: A 5G Strategy for the UK (March 2017)