

**BLOCKCHAIN TECHNOLOGIES** 

All-Party Parliamentary Group

# **Blockchain APPG** Visit to **Durham University**

18th July 2025



# **MEETING REPORT**

Date: Friday, 18th July 2025

Venue:

The Waterside Building, Durham University Business School Fourth Floor, Executive Hub

Meeting Type:

Parliamentary Visit and Government - Academia Engagement





#### **Executive Summary**

The All-Party Parliamentary Group (APPG) on Blockchain conducted a successful visit to Durham University Business School to explore collaboration opportunities between academia and policymakers. The visit highlighted Durham University's research excellence across blockchain-relevant disciplines and reinforced the university's leadership in shaping blockchain innovation, policy, and industry engagement.

#### Attendees

APPG Delegation: **Matt Vickers MP - Chair, APPG Blockchain Prof Dr Naseem Naqvi MBE**- President, British Blockchain Association **Deborah Cleary** - APPG Secretariat **Josh Brown** - Parliamentary Office of Matt Vickers MP

Durham University Representatives: Professor Karen O'Brien - Vice-Chancellor and Warden Professor Kieran Fernandes - Executive Dean, Business School Professor Olga Epitropaki - Deputy Executive Dean for Research Professor Hubert Shum - Computer Science Department Professor Hongjian Sun - Engineering Department Dr Gagangeet Singh Aujla - Computer Science Department Professor Atanu Chaudhuri- Technology & Operations Dr Anish Jindal - Computer Science Department Professor Julian Williams - Accounting and Finance Department







### Agenda and Proceedings

1. Welcome and Networking Lunch

The session commenced with lunch and networking, providing an opportunity for informal dialogue between the APPG delegation and Durham University leadership.

#### 2. Opening Remarks

Professor Karen O'Brien welcomed the delegation, emphasising Durham University's commitment to the advanced technology sector. Professor Kieran Fernandes provided introductory remarks, a history of the university, invited the APPG chair and Secretariat to sign a specially crafted visitor's book, and subsequently guided the agenda and his team.





# **Academic Presentations**

#### Professor Hubert Shum (Computer Science) Topic: AI, Digital Twins, and Blockchain Integration

Highlighted the £42 million dedicated new facility for Computer Science. Noted world-leading research directly and indirectly informed by blockchain technology. Emphasized Durham University's success in securing external research grants.

Discussed hosting regional supercomputers (Bede and GPU Supercomputer). Outlined tailored blockchain modules in educational portfolio. Mentioned participation in international conferences and forums

# **Professor Hongjian Sun (Engineering)**

#### **Topic: Smart Energy Systems and Blockchain Technologies**

Presented peer-to-peer energy trading applications

Outlined the "3D" approach: Decarbonisation, Decentralisation, Digitalisation using blockchain

Discussed blockchain solutions for balancing energy supply and demand

Introduced CHEDDAR project (https://cheddarhub.org/) for next-generation 6G communications

Noted 50 researchers working in this area

Publications in leading journals with impact factor of 12





# Dr Gagangeet S. Aujla (Computer Science) Topic: Blockchain Applications in IoT and Energy

Presented work on supply chain, healthcare, scalability, and cloud privacy

Discussed project-oriented blockchain learning methodologies Outlined "proof of learning" consensus mechanisms

Presented unconventional blockchain architecture including "OneDroneOneBlock" project

Highlighted work on compliance, verification, and privacy solutions

# Dr Anish Jindal (Computer Science)

# **Topic: Cybersecurity and Distributed Ledger Technologies**

Presented studies on blockchain adoption impact and Digital Product Passports

Shared research on 180 company announcements regarding blockchain adoption

Demonstrated significant performance improvements across various metrics

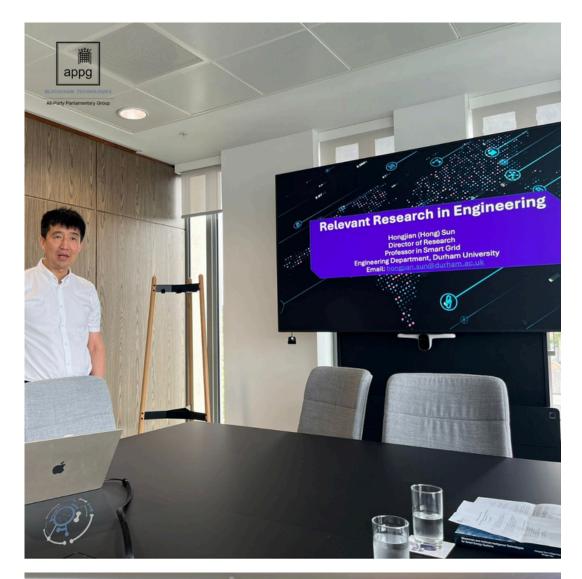
Presented case studies including Volvo and Silent Night Key Policy Recommendations:

Need for government incentives for blockchain adoption Support for critical sectors through guidelines and timelines Enhanced support for blockchain research in supply chain applications

# Professor Atanu Chaudhuri Department of Operations and Technology Management Topic: Blockchain for Operational Resilience

Presented various case studies and his work on Process Model for Blockchain Implementation for Transaction Time Reduction and Quality Improvement.









# Professor Julian Williams (Finance) Topic: Blockchain's Role in Capital Markets and Finance Talent Retention and Student Engagement

Highlighted Durham University's 76th global ranking and strong finance research unit. Discussed long history of financial engineering since the 1980s. Presented research on distributed exchanges and smart contracts. Raised concerns about UK talent retention in blockchain research.

Critical Issues Identified:

- Loss of leading academics to international institutions
- Low domestic student engagement in blockchain/fintech programs
- Need for government stewardship and support
- Financial sustainability challenges facing research-intensive universities





#### Key Discussion Points and Q&A

Blockchain Adoption Incentives

Question: Are companies sufficiently incentivised to adopt blockchain?

Response: Current lack of incentives identified as barriers. Need for policy guidelines, training support, and specific sector incentives recommended.

International Competitiveness

Question: How does the UK perform internationally in blockchain adoption?

Response: While technology benefits are recognised, implementation requires significant effort. Global supply chain nature makes country-specific analysis challenging.

Domestic Student Engagement

Question: How can we better engage UK students in blockchain/fintech?

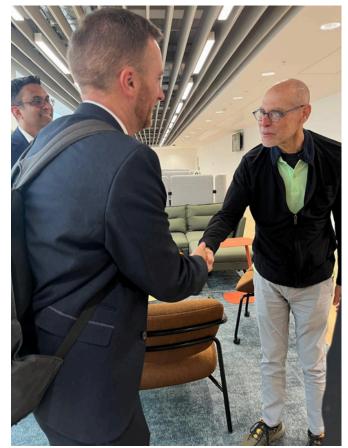
Response: Need to address negative perceptions about the university sector and STEM education. Government messaging and support crucial for enthusiasm generation.

Public-Private Partnerships

Question: Should there be more public-private partnerships?

Response: University sustainability requires investment mechanisms for research-intensive institutions. Current business model challenges threaten future innovation capacity.









#### Facility Tour:

The delegation toured the Waterside Building, showcasing Durham University's state-of-the-art facilities and commitment to cutting-edge business and technology research. The APPG Chair also met with visiting Professor Allan Malz from Columbia University - former vice president of the Markets Group at the Federal Reserve Bank of New York from 2009 to 2014.

#### Key Recommendations from APPG Visit:

- Government Incentives: Develop targeted incentive mechanisms for blockchain adoption in critical sectors
- Talent Retention: Implement strategies to retain world-class blockchain researchers in UK institutions
- Educational Engagement: Address negative perceptions and encourage domestic student participation in blockchain/fintech programs
- University Sustainability: Review funding mechanisms for research-intensive universities
- International Competitiveness: Strengthen UK position in global blockchain research and development



#### Closing Comments - Matt Vickers MP, APPG Chair:

"Today's visit to Durham University Business School was a powerful reminder of the vital role that collaboration between academia, policy, and industry plays in driving Web3 innovation and economic growth across the UK. Hearing directly from the Deans about their pioneering research in emerging technologies, business practices and entrepreneurial leadership, it's clear that institutions like Durham are not only generating world-class knowledge, but also addressing some of the most pressing real-world challenges of our time.

As Chair of the All-Party Parliamentary Group on Blockchain, I'm proud of our continued efforts to facilitate dialogue that informs smarter policymaking and elevates the impact of UK universities. I would like to extend special thanks to the British Blockchain Association for their outstanding work as secretariat in arranging today's visit.

Engagements like this are critical. They ensure our national policies are grounded in academic and industry expertise, while fostering partnerships that create jobs, drive regional development, and secure the UK's competitive edge in a rapidly evolving global economy. We look forward to maintaining this momentum with future visits to universities across the country, deepening these essential collaborations."

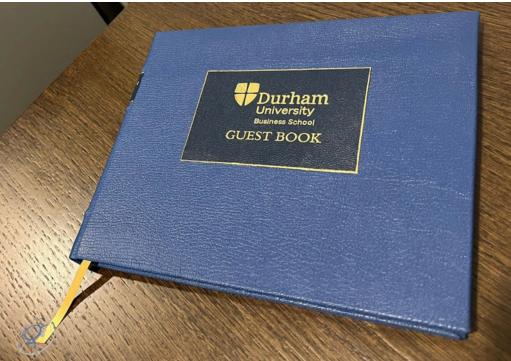


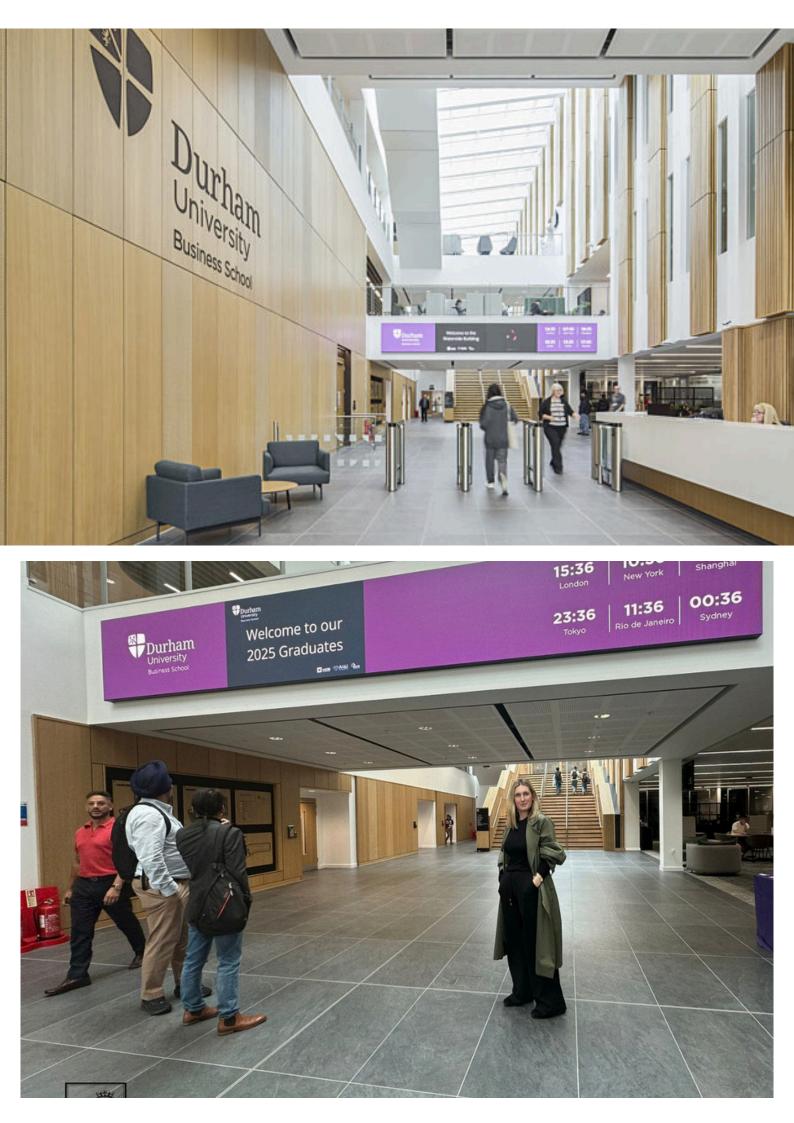
# **Comments - Professor Dr Naseem Naqvi MBE** Head of APPG Secretariat President, The British Blockchain Association

"The British Blockchain Association is home to the world's largest university blockchain network. Through our Centre for Evidence-Based Blockchain and the Journal of the British Blockchain Association, we have cultivated a vibrant ecosystem of some of the brightest and most respected minds in blockchain research and innovation. As Head of the APPG Secretariat, I was genuinely inspired by our recent visit to Durham University. It served as a powerful reminder of the pivotal role universities play in advancing blockchain research and education—critical pillars for strengthening the UK's digital economy and building a resilient pipeline of future talent and skills. Engaging with Durham's outstanding academic team underscored the importance of collaboration between government, industry, and academia in shaping smart, evidencebased policy for Web3 and beyond. At the BBA, this is exactly what we strive to do-connecting world-class academic insight with realworld application to position the UK as a global leader in blockchain innovation. This visit marks another important step in that journey. We look forward to visiting more universities in the coming months, as part of our APPG university engagement programme for Parliamentarians."





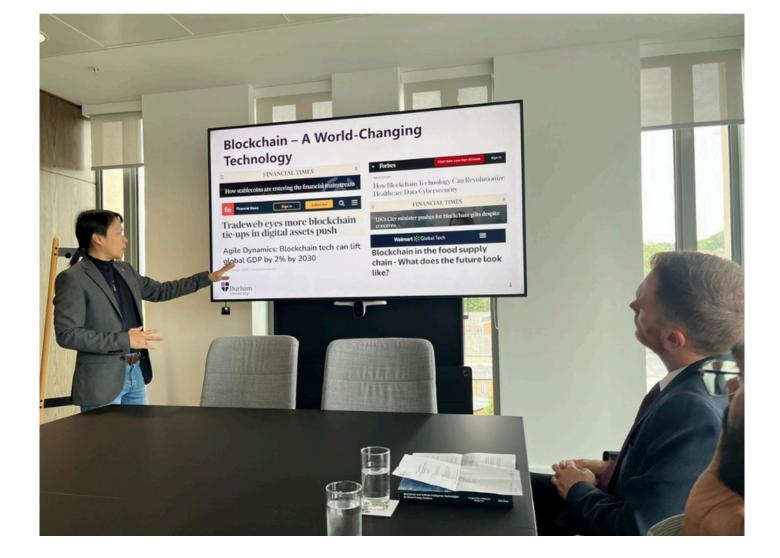
















# **BBA University Network**

(Universities actively involved in blockchain research and/or offers at least one post-graduate teaching module/ Cert/ Diploma/ MSc/ PhD on Blockchain / DLT and/or Cryptocurrencies. **The JBBA is indexed at these universities**)



**BBA: The World's Largest University Blockchain Network** 

