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**17-year-old Create the Trophy competition winner attends QEPrize award ceremony at Buckingham Palace**

**London, 3 December 2019**: Today, during a ceremony at Buckingham Palace, four US engineers were presented with the 2019 Queen Elizabeth Prize for Engineering (QEPrize) for their work creating the first truly global, satellite-based positioning system, GPS. The elegant trophy design was created by the 2019 Create the Trophy competition winner, 17-year-old Jack Jiang from Hong Kong, whose trophy was selected from an unprecedented number of entries around the world. Jack’s intricate design impressed the judges with its complexity and balance, amalgamating traditional trophy elements with elegantly designed wind turbines.

The 2019 competition, opened to budding designers aged between 14 and 24, received record engagement from over 50 countries and a breadth of innovative designs. Jack and nine other finalists were selected for review by an expert panel of judges, designers, and engineers led by Ian Blatchford, Director and Chief Executive of the Science Museum Group. Joining him on the panel were Roma Agrawal, Associate Director at Aecom; Zoe Laughlin, co-founder and Director of the Institute of Making; and Rebeca Ramos, then project leader at Heatherwick Studio.

The QEPrize is the world’s most prestigious engineering accolade, a £1 million prize that celebrates an engineer or group of engineers responsible for a ground-breaking innovation of significant positive impact on humanity. In addition to receiving a state-of-the-art laptop, Jack was invited to attend the presentation ceremony at the Palace to see his trophy presented to Dr Bradford Parkinson, Hugo Fruehauf, Richard Schwartz, and Anna Marie Spilker, who accepted the award on behalf of her late husband, Professor James Spilker, Jr.

“It is an incredible honour to be part of this ceremony.”, says Jack. “It is the opportunity of a lifetime to go to Buckingham Palace and see my trophy being presented to the engineers responsible for making the GPS. It is extremely rewarding and inspirational.”

The Create the Trophy competition gives young people the opportunity to create a piece of engineering history using the latest in 3D technology, QEPrize3D, a free app available on both iOS and Android. The app provides a catalogue of shapes and materials to choose from, and an in-app photo studio allows users to show off their creations.

The shortlisted designs can all be viewed at: [qeprize.org/trophy-2019](http://www.qeprize.org/trophy-2019).

**Sir Ian Blatchford, director of the Science Museum Group and chairman of the judging panel, said of the winning trophy**: “What struck the judges most about Jack’s design is how well it manages to demonstrate its two main inspirations. It is both an elegant design that acknowledges the traditional trophy form, but its resemblance to wind turbines shows Jack’s strong passion for engineering and its role in solving future global problems.

“We also chose Jack’s design for its sheer exuberance – it required a great amount of concentration and imagination to make. That quality greatly appealed to the judges.”

**Ends**

**About the competition**

Every two years, those aged between 14 and 24 are invited to submit a timeless design that encapsulates the spirit of engineering. Entries are made via the Create the Trophy app, which is free to download through the Apple [App Store](https://itunes.apple.com/uk/app/qeprize-3d-design-studio/id1162063213?ls=1&mt=8) and [Amazon Appstore](https://www.amazon.co.uk/dp/B07HQSMXJG/ref%3Dcm_sw_r_cp_ep_dp_d8FSBbHV4J6YJ). For more details (including rules and conditions), please go to: [qeprize.org/trophy](http://www.qeprize.org/trophy).

**About the judging panel**

**Sir Ian Blatchford** is Director of the Science Museum Group, which includes the National Railway Museum in York and Shildon; the Museum of Science & Industry; and the National Media Museum in Bradford. The Science Museum Group plays a vital role in helping to inspire the next generation of scientists and engineers, showcasing the best of British research and providing accessible and inspiring exhibitions and events for both adults and children. He was appointed a Knight Bachelor in the 2019 New Year Honours for services to Cultural Education.

## Roma Agrawal is a structural engineer at AECOM. Previously, she worked as design manager at Interserve, and was a senior structural engineer on the Shard in London. Roma was awarded the ‘Diamond Award for Engineering Excellence’ by the Association for Consultancy and Engineering and ‘Young Structural Engineer of the Year’ by the Institution of Structural Engineers. Roma is an advocate of engineering, scientific, and technical careers to young people.

Roma said of the winner: "Jack’s design stood out from the start. There is so much going on with it; it’s a very dynamic creation. From one angle it looks like a traditional trophy but, from above, you see beautifully curved shapes that resemble a wind turbine. What I particularly enjoy about Jack’s design is how he managed to create very gradual and subtle curves out of what are quite blocky building pieces. He really pushed the boundaries.”

**Rebeca Ramos** is an architect, designer and producer with international experience in a broad range of architectural and creative projects. She joined Heatherwick Studio in 2015 where she has worked in Pier 55 in NYC and Google Kings Cross in London.

Rebeca said of the winner: “It was instantly clear to us that Jack put a lot of thought and effort into his design. It was significantly more complex than the obvious solutions entrants typically consider using the individual tools in the app. Not only did he end up with a design that worked incredibly well as a trophy, but his iterative use of individual shapes to create an intricate structure also mirrors engineering’s iterative nature. To me, that was a very successful combination, and I would like to see more of that in the next competition.”

**Zoe Laughlin** is the co-founder and Director of the Institute of Making. She is an artist, maker, presenter, and materials expert exploring the engineering, science, design, and craft of ‘stuff’. She earned a PhD in Material Science in the Department of Engineering at King’s College London in 2010, and works at the interface of the science, art, craft and design of materials.

**Zoe said of the winner**: “What stood out about Jack’s design was how he balanced the referencing of something more traditional with something more contemporary. We like the fact that it’s not trying to be a monument. It’s not a doorstop; it’s something that engages you, makes you want to pick it up, and makes you wonder how on earth this thing was made. I think that’s really important. It’s not just something that’s going to sit on the shelf, it makes you want to hold it and turn it in your hands.”

**Interview Requests**

For more information or to request an interview with the winner or any of the judging panel please contact alex.garvey@edelman.com

**Assets**

Images and videos are available to download from qeprize.org/press.

**Social Media**

Twitter, Facebook, and Instagram: @QEPrize3d #createthetrophy

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**About the Queen Elizabeth Prize for Engineering**

The Queen Elizabeth Prize for Engineering (QEPrize) is the world’s most prestigious engineering prize, celebrating the engineers responsible for a ground-breaking innovation in engineering that has been of global benefit to humanity. The £1 million prize is awarded every two years; it aims to raise the public profile of engineering and inspire young people to take up the engineering challenges of the future.

The inaugural winners in 2013 were Robert Kahn, Vint Cerf, Louis Pouzin, Sir Tim Berners-Lee, and Marc Andreessen for revolutionising the way we communicate. Their seminal contributions led to the development of the Internet, the World Wide Web, and the Mosaic browser. In 2015, the QEPrize was awarded to Dr Robert Langer for his revolutionary advances and leadership in engineering at the interface with chemistry and medicine. His pioneering work in controlled release large molecule drug delivery systems has benefitted the lives of more than two billion people worldwide. In 2017, Eric Fossum, George Smith, Nobukazu Teranishi, and Michael Tompsett were awarded the prize for their combined contributions to digital imaging.