Tim Berners-Lee

Sir Timothy John Berners-Lee, OM, KBE, FRS, FREng, FRSA, DFBCS, RDI (born 8 June 1955),[1] also known as **TimBL**, is an English computer scientist best known as the inventor of the World Wide Web. He is a professorial research fellow at the University of Oxford[2] and a professor emeritus at the Massachusetts Institute of Technology (MIT).[3][4] Berners-Lee proposed an information management system on 12 March 1989,[5][6] then implemented the first successful communication between a Hypertext Transfer Protocol (HTTP) client and server via the Internet in mid-November.[7][8][9][10][11]

Berners-Lee is the director of the World Wide Web Consortium (W3C), which oversees the continued development of the Web. He co-founded (with his then-wife-to-be Rosemary Leith) the World Wide Web Foundation. He is a senior researcher and holder of the 3Com founder's chair at the MIT Computer Science and Artificial Intelligence Laboratory (CSAIL).[12] He is a director of the Web Science Research Initiative (WSRI)[13] and a member of the advisory board of the MIT Center for Collective Intelligence.[14][15] In 2011, he was named as a member of the board of trustees of the Ford Foundation.[16] He is a founder and president of the Open Data Institute and is currently an advisor at social network MeWe.[17]

He devised and implemented the first Web browser and Web server, and helped foster the Web's subsequent explosive development. He currently directs the W3 Consortium, developing tools and standards to further the Web's potential. In April 2009, he was elected as Foreign Associate of the National Academy of Sciences.[18][19]

In 2004, Berners-Lee was knighted by Queen Elizabeth II for his pioneering work.[20][21] He was named in *Time* magazine's list of the 100 Most Important People of the 20th century and has received a number of other accolades for his invention.[22] He was honoured as the "Inventor of the World Wide Web" during the 2012 Summer Olympics opening ceremony in which he appeared working with a vintage NeXT Computer.[23] He tweeted "This is for everyone"[24] which appeared in LED lights attached to the chairs of the audience.[23] He received the 2016 Turing

Sir					
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Berners-Lee in 2014

Born	Timothy John Berners-Lee 8 June 1955 London, England
Other names	TimBL TBL
Education	The Queen's College, Oxford (BA)
Known for	Invention of the World Wide Web
Spouse(s)	Nancy Carlson (m. 1990; div. 2011) Rosemary Leith (m. 2014)
Children	2 children; 3 step-children
Parent(s)	Conway Berners-Lee Mary Lee Woods
Awards	Turing Award (2016) Queen Elizabeth Prize (2013) Foreign Associate of the National Academy of

Award "for inventing the World Wide Web, the first web browser, and the fundamental protocols and algorithms allowing the Web to scale".[25]

Early life and education

Berners-Lee was born on 8 June 1955 in London, England,[26] the eldest of the four children of Mary Lee Woods and Conway Berners-Lee; his brother Mike is a professor of ecology and climate change management. His parents were computer scientists who worked on the first commercially built computer, the Ferranti Mark 1. He attended Sheen Mount Primary School, and then went on to attend south-west London's Emanuel School from 1969 to 1973, at the time a direct grant grammar school, which became an independent school in 1975.[1][20] A keen trainspotter as a child, he learnt about electronics from tinkering with a model railway.[27] He studied at The Queen's College, Oxford, from 1973 to 1976, where he received a first-class Bachelor of Arts degree in physics.[1][26] While at university, Berners-Lee made a computer out of an old television set, which he bought from a repair shop.[28]

Career and research

After graduation, Berners-Lee worked as an engineer at the telecommunications company Plessey in Poole, Dorset.[26] In 1978, he joined D. G. Nash in Ferndown, Dorset, where he helped create typesetting software for printers.[26]

Berners-Lee worked as an independent contractor at CERN from June to December 1980. While in Geneva, he proposed a project based on the concept of hypertext, to facilitate sharing and updating information among researchers.[29] To demonstrate it, he built a prototype system named ENQUIRE.[30]

After leaving CERN in late 1980, he went to work at John Poole's Image Computer Systems, Ltd, in Bournemouth, Dorset.[31] He ran the company's technical side for three years.[32] The project he worked on was a "real-time remote procedure call" which gave him experience in computer networking.[31] In 1984, he returned to CERN as a fellow.[30]

Berners-Lee, 2005

In 1989, CERN was the largest Internet node in Europe and Berners-Lee saw an opportunity to join hypertext with the Internet:

> I just had to take the hypertext idea and connect it to the TCP and DNS ideas and—ta-da!— the World Wide Web.
>
> — Tim Berners-Lee[33]

> Creating the web was really an act of desperation, because the situation without it was very difficult when I was working at CERN later. Most of the technology involved in the web, like the hypertext, like the Internet, multifont text objects, had all been designed already. I just had to put them together. It was a step of generalising, going to a higher level of abstraction, thinking about all the documentation systems out there as being possibly part of a larger imaginary documentation system.
>
> — Tim Berners-Lee[34]

Berners-Lee wrote his proposal in March 1989 and, in 1990, redistributed it. It then was accepted by his manager, Mike Sendall, who called his proposals "vague, but exciting".[35] Robert Cailliau had independently proposed a project to develop a hypertext system at CERN, and joined Berners-Lee as a partner in his efforts to get the web off the ground.[30] They used similar ideas to those underlying the ENQUIRE system to create the World Wide Web, for which Berners-Lee designed and built the first web browser. His software also functioned as an editor (called WorldWideWeb, running on the NeXTSTEP operating system), and the first Web server, CERN HTTPd (short for Hypertext Transfer Protocol daemon).

This NeXT Computer was used by Berners-Lee at CERN and became the world's first web server.

Berners-Lee published the first web site, which described the project itself, on 20 December 1990; it was available to the Internet from the CERN network. The site provided an explanation of what the World Wide Web was, and how people could use a browser and set up a web server, as well as how to get started with your own website.[36][37][38][39][28] On 6 August 1991, Berners-Lee first posted, on Usenet, a public invitation for collaboration with the WorldWideWeb project.[40]

In a list of 80 cultural moments that shaped the world, chosen by a panel of 25 eminent scientists, academics, writers and world leaders, the invention of the World Wide Web was ranked number one, with the entry stating, "The fastest growing communications medium of all time, the Internet has changed the shape of modern life forever. We can connect with each other instantly, all over the world."[41]

In 1994, Berners-Lee founded the W3C at the Massachusetts Institute of Technology. It comprised various companies that were willing to create standards and recommendations to improve the quality of the Web. Berners-Lee made his idea available freely, with no patent and no royalties due. The World Wide Web Consortium decided that its standards should be based on royalty-free technology, so that they easily could be adopted by anyone.[42]

Berners-Lee participated in Curl Corp's attempt to develop and promote the Curl programming language.[43]

In 2001, Berners-Lee became a patron of the East Dorset Heritage Trust, having previously lived in Colehill in Wimborne, East Dorset.[44] In December 2004, he accepted a chair in computer science at the School of Electronics and Computer Science, University of Southampton, Hampshire, to work on the Semantic Web.[45][46]

In a *Times* article in October 2009, Berners-Lee admitted that the initial pair of slashes ("//") in a web address were "unnecessary". He told the newspaper that he easily could have designed web addresses without the slashes. "There you go, it seemed like a good idea at the time," he said in his lighthearted

apology.[47]

Policy work

In June 2009, then-British prime minister Gordon Brown announced that Berners-Lee would work with the UK government to help make data more open and accessible on the Web, building on the work of the Power of Information Task Force.[48] Berners-Lee and Professor Nigel Shadbolt are the two key figures behind data.gov.uk, a UK government project to open up almost all data acquired for official purposes for free reuse. Commenting on the opening up of Ordnance Survey data in April 2010, Berners-Lee said: "The changes signal a wider cultural change in government based on an assumption that information should be in the public domain unless there is a good reason not to—not the other way around." He went on to say: "Greater openness, accountability and transparency in Government will give people greater choice and make it easier for individuals to get more directly involved in issues that matter to them."[49]

Tim Berners-Lee at the Home Office, London, on 11 March 2010

In November 2009, Berners-Lee launched the World Wide Web Foundation (WWWF) in order to campaign to "advance the Web to empower humanity by launching transformative programs that build local capacity to leverage the Web as a medium for positive change".[50]
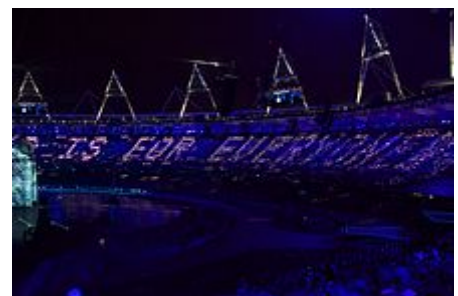
Berners-Lee is one of the pioneer voices in favour of net neutrality,[51] and has expressed the view that ISPs should supply "connectivity with no strings attached", and should neither control nor monitor the browsing activities of customers without their expressed consent.[52][53] He advocates the idea that net neutrality is a kind of human network right: "Threats to the Internet, such as

Berners-Lee speaking at the launch of the World Wide Web Foundation

companies or governments that interfere with or snoop on Internet traffic, compromise basic human network rights."[54] Berners-Lee participated in an open letter to the US Federal Communications Commission (FCC). He and 20 other Internet pioneers urged the FCC to cancel a vote on 14 December 2017 to uphold net neutrality. The letter was addressed to Senator Roger Wicker, Senator Brian Schatz, Representative Marsha Blackburn and Representative Michael F. Doyle.[55]

Berners-Lee joined the board of advisors of start-up State.com, based in London.[56] As of May 2012, he is president of the Open Data Institute,[57] which he co-founded with Nigel Shadbolt in 2012.

The Alliance for Affordable Internet (A4AI) was launched in October 2013 and Berners-Lee is leading the coalition of public and private organisations that includes Google, Facebook, Intel and Microsoft. The A4AI seeks to make Internet access more affordable so that access is broadened in the developing world, where only 31% of people are online. Berners-Lee will work with those aiming to decrease Internet access prices so that they fall below the UN Broadband Commission's worldwide target of 5% of monthly income.[58]

Berners-Lee's tweet, "This is for everyone",[24] at the 2012 Summer Olympic Games in London

Berners-Lee holds the founders chair in Computer Science at the Massachusetts Institute of Technology, where he heads the Decentralized Information Group and is leading Solid, a joint project with the Qatar Computing Research Institute that aims to radically change the way Web applications work today, resulting in true data ownership as well as improved privacy.[59] In October 2016, he joined the Department of Computer Science at Oxford University as a professorial research fellow[60] and as a fellow of Christ Church, one of the Oxford colleges.[61]

From the mid 2010s Berners-Lee initially remained neutral on the emerging Encrypted Media Extensions (EME) proposal for with its controversial Digital Rights Management (DRM) implications.[62] In March 2017 he felt he had to take a position which was to support the EME proposal.[62] He reasoned EME's virtues whilst noting DRM was inevitable.[62] As W3C director, he went on to approve the finalised specification in July 2017.[63][62] His stance was opposed by some including Electronic Frontier Foundation (EFF), the anti-DRM campaign Defective by Design and the Free Software Foundation.[63] Varied concerns raised included being not supportive of the Internet's open philosophy against commercial interests and risks of users being forced to use a particular web browser to view specific DRM content.[62] The EFF raised a formal appeal which did not succeed and the EME specification became a formal W3C recommendation in September 2017.[64]

Tim Berners-Lee at the Science Museum for the Web@30 event, March 2019

On 30 September 2018, Berners-Lee announced his new open-source startup Inrupt to fuel a commercial ecosystem around the Solid project, which aims to give users more control over their personal data and lets them choose where the data goes, who's allowed to see certain elements and which apps are allowed to see that data.[65][66]

In November 2019 at the Internet Governance Forum in Berlin Berners-Lee and the WWWF launched *Contract for the Web*, a campaign initiative to persuade governments, companies and citizens to commit to nine principles to stop "misuse", with the warning that "if we don't act now – and act together – to prevent the web being misused by those who want to exploit, divide and undermine, we are at risk of squandering [its potential for good]".[67]

Awards and honours

Berners-Lee has received many awards and honours. He was knighted by Queen Elizabeth II in the 2004 New Year Honours "for services to the global development of the Internet", and was invested formally on 16 July 2004.[20][21]

On 13 June 2007, he was appointed to the Order of Merit (OM), an order restricted to 24 (living) members.[68] Bestowing membership of the Order of Merit is within the personal purview of the Queen and does not require recommendation by ministers or the Prime Minister.

He was elected a Fellow of the Royal Society (FRS) in 2001.[69] He was also elected as a member into the American Philosophical Society in 2004[70] and the National Academy of Engineering in 2007.

"He wove the World Wide Web and created a mass medium for the 21st century. The World Wide Web is Berners-Lee's alone. He designed it. He loosed it on the world. And he more than anyone else has fought to keep it open, nonproprietary and free."

—Tim Berners-Lee's entry in *Time* magazine's list of the 100 Most Important

He has been conferred honorary degrees from a number of universities around the world, including Manchester (his parents worked on the Manchester Mark 1 in the 1940s), Harvard and Yale.[71][72][73]

In 2012, Berners-Lee was among the British cultural icons selected by artist Sir Peter Blake to appear in a new version of his most famous artwork – the Beatles' *Sgt. Pepper's Lonely Hearts Club Band* album cover – to celebrate the British cultural figures of his life that he most admires to mark his 80th birthday.[74][75]

In 2013, he was awarded the inaugural Queen Elizabeth Prize for Engineering.[76] On 4 April 2017, he received the 2016 ACM Turing Award "for inventing the World Wide Web, the first web browser, and the fundamental protocols and algorithms allowing the Web to scale".[25]

Personal life

Berners-Lee has said "I like to keep work and personal life separate."[77]

Berners-Lee married Nancy Carlson, an American computer programmer, in 1990. She was also working in Switzerland at the World Health Organization.[78] They had two children and divorced in 2011. In 2014, he married Rosemary Leith at the Chapel Royal, St. James's Palace in London.[79] Leith is a Canadian Internet and banking entrepreneur and a founding director of Berners-Lee's World Wide Web Foundation.[80] The couple also collaborate on venture capital to support artificial intelligence companies.[81]

Berners-Lee was raised as an Anglican, but he turned away from religion in his youth. After he became a parent, he became a Unitarian Universalist (UU).[82] When asked whether he believes in God, he stated: "Not in the sense of most people, I'm atheist and Unitarian Universalist."[83]

The web's source code was auctioned by Sotheby's in London during 23–30 June 2021, as a non-fungible token (NFT) by TimBL.[84][85][86] Selling for USD $5,434,500,[87] it was reported the proceeds would be used to fund initiatives by TimBL and his wife, Rosemary Leith.[86][84]

References

1. Anon (2015). "Berners-Lee, Sir Timothy (John)" (https://www.ukwhoswho.com/view/article/oupww/whoswho/U12699). *Who's Who*. *ukwhoswho.com* (online Oxford University Press ed.). A & C Black, an imprint of Bloomsbury Publishing plc. doi:10.1093/ww/9780199540884.013.U12699 (https://doi.org/10.1093%2Fww%2F9780199540884.013.U12699). (Subscription or UK public library membership (https://www.ukwhoswho.com/page/subscribe#public) required.) (subscription required)
2. "Tim Berners-Lee" (https://www.cs.ox.ac.uk/people/tim.berners-lee/). *Department of Computer Science*. Retrieved 27 May 2020.
3. "Sir Tim Berners-Lee joins Oxford's Department of Computer Science" (http://www.ox.ac.uk/news/2016-10-27-sir-tim-berners-lee-joins-oxfords-department-computer-science). *ox.ac.uk*. University of Oxford. Retrieved 18 September 2018.
4. "Tim Berners-Lee | MIT CSAIL" (https://www.csail.mit.edu/person/tim-berners-lee). *www.csail.mit.edu*. Retrieved 19 September 2021.
5. Foundation, Web (12 March 2019). "30 years on, what's next #ForTheWeb?" (https://webfoundation.org/2019/03/web-birthday-30/). *World Wide Web Foundation*.

6. "info.cern.ch – Tim Berners-Lee's proposal" (http://info.cern.ch/Proposal.html). *cern.ch*. Info.cern.ch. Retrieved 21 December 2011.

7. Tim Berners Lee's own reference. The exact date is unknown.

8. Berners-Lee, Tim; Mark Fischetti (1999). *Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web by its inventor*. Britain: Orion Business. ISBN 978-0-7528-2090-3.

9. Berners-Lee, T. (2010). "Long Live the Web". *Scientific American*. **303** (6): 80–85. Bibcode:2010SciAm.303f..80B (https://ui.adsabs.harvard.edu/abs/2010SciAm.303f..80B). doi:10.1038/scientificamerican1210-80 (https://doi.org/10.1038%2Fscientificamerican1210-80). PMID 21141362 (https://pubmed.ncbi.nlm.nih.gov/21141362).

10. Shadbolt, N.; Berners-Lee, T. (2008). "Web science emerges". *Scientific American*. **299** (4): 76–81. Bibcode:2008SciAm.299d..76S (https://ui.adsabs.harvard.edu/abs/2008SciAm.299d..76S). doi:10.1038/scientificamerican1008-76 (https://doi.org/10.1038%2Fscientificamerican1008-76). PMID 18847088 (https://pubmed.ncbi.nlm.nih.gov/18847088).

11. Berners-Lee, T.; Hall, W.; Hendler, J.; Shadbolt, N.; Weitzner, D. (2006). "Computer Science: Enhanced: Creating a Science of the Web" (http://eprints.soton.ac.uk/262615/). *Science*. **313** (5788): 769–771. doi:10.1126/science.1126902 (https://doi.org/10.1126%2Fscience.1126902). PMID 16902115 (https://pubmed.ncbi.nlm.nih.gov/16902115). S2CID 5104030 (https://api.semanticscholar.org/CorpusID:5104030).

12. Schorow, Stephanie (5 January 2007). "Draper Prize" (http://web.mit.edu/newsoffice/2007/draper-prize.html). *mit.edu*. Massachusetts Institute of Technology. Retrieved 25 May 2008.

13. "People" (https://web.archive.org/web/20080628052526/http://webscience.org/about/people/). The Web Science Research Initiative. Archived from the original (http://webscience.org/about/people/) on 28 June 2008. Retrieved 17 January 2011.

14. "MIT Center for Collective Intelligence (homepage)" (http://cci.mit.edu). *mit.edu*. Cci.mit.edu. Retrieved 15 August 2010.

15. "MIT Center for Collective Intelligence (people)" (https://web.archive.org/web/20100611041615/http://cci.mit.edu/people/index.html). Cci.mit.edu. Archived from the original (http://cci.mit.edu/people/index.html) on 11 June 2010. Retrieved 15 August 2010.

16. Bratt, Steve (29 September 2011). "Sir Tim Berners-Lee Named to the Ford Foundation Board" (https://webfoundation.org/2011/09/sir-tim-berners-lee-ford-board/). *World Wide Foundation*. Retrieved 22 August 2017.

17. Shukman, Harry; Bridge, Mark (8 January 2019). "Sir Tim Berners-Lee's app MeWe is used by neo-Nazis and perverts" (https://www.thetimes.co.uk/article/sir-tim-berners-lee-s-app-mewe-is-used-by-neo-nazis-and-perverts-svflhn32s). *The Times*. ISSN 0140-0460 (https://www.worldcat.org/issn/0140-0460). Retrieved 12 March 2019.

18. "Timothy Berners-Lee Elected to National Academy of Sciences" (http://www.ddj.com/217200450). Dr. Dobb's Journal. Retrieved 9 June 2009.

19. "72 New Members Chosen By Academy" (http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=04282009) (Press release). United States National Academy of Sciences. 28 April 2009. Retrieved 17 January 2011.

20. "Web's inventor gets a knighthood" (http://news.bbc.co.uk/1/hi/technology/3357073.stm). *BBC News*. 31 December 2003. Retrieved 10 November 2015.

21. "Creator of the web turns knight" (http://news.bbc.co.uk/1/hi/technology/3899723.stm). *BBC News*. 16 July 2004. Retrieved 10 November 2015.

22. Quittner, Joshua (29 March 1999). "Tim Berners Lee—Time 100 People of the Century" (https://web.archive.org/web/20071016213128/http://www.time.com/time/magazine/article/0,9171,990627,00.html). *Time Magazine*. Archived from the original (http://www.time.com/time/magazine/article/0,9171,990627,00.html) on 16 October 2007.

23. Friar, Karen (28 July 2012). "Sir Tim Berners-Lee stars in Olympics opening ceremony" (https://www.zdnet.com/uk/sir-tim-berners-lee-stars-in-olympics-opening-ceremony-7000001744/). *ZDNet*. Retrieved 28 July 2012.

24. Berners-Lee, Tim (27 July 2012). "This is for everyone" (https://twitter.com/timberners_lee/status/228960085672599552). Twitter. Retrieved 28 July 2012.

25. "A. M. Turing Award" (http://amturing.acm.org/award_winners/berners-lee_8087960.cfm). Association for Computing Machinery. 2016. Retrieved 4 April 2017.

26. "Berners-Lee Longer Biography" (http://www.w3.org/People/Berners-Lee/Longer.html). *w3.org*. World Wide Web Consortium. Retrieved 18 January 2011.

27. Edgecliffe-Johnson, Andrew (7 September 2012). "Lunch with the FT: Tim Berners-Lee" (https://www.ft.com/cms/s/0/b022ff6c-f673-11e1-9fff-00144feabdc0.html#axzz25mg7CPq7). *Financial Times*. Archived (https://ghostarchive.org/archive/tlWxm) from the original on 10 December 2022. Retrieved 11 June 2017.

28. "He caught us all in the Web!" (https://www.thehindu.com/todays-paper/tp-in-school/he-caught-us-all-in-the-web/article24836867.ece). *The Hindu*. 1 September 2018. ISSN 0971-751X (https://www.worldcat.org/issn/0971-751X). Retrieved 2 September 2018.

29. "Berners-Lee's original proposal to CERN" (http://www.w3.org/History/1989/proposal.html). *w3.org*. World Wide Web Consortium. March 1989. Retrieved 25 May 2008.

30. Stewart, Bill. "Tim Berners-Lee, Robert Cailliau, and the World Wide Web" (http://www.livinginternet.com/w/wi_lee.htm). Retrieved 22 July 2010.

31. Berners-Lee, Tim. "Frequently asked questions" (http://www.w3.org/People/Berners-Lee/FAQ.html). World Wide Web Consortium. Retrieved 22 July 2010.

32. Grossman, Wendy (15 July 1996). "All you never knew about the Net ...". *The Independent*.

33. Berners-Lee, Tim. "Answers for Young People" (http://www.w3.org/People/Berners-Lee/Kids.html). World Wide Web Consortium. Retrieved 25 May 2008.

34. "Visionary of the Internet" (https://www.achievement.org/achiever/sir-timothy-berners-lee/#interview). *www.achievement.org*. American Academy of Achievement. 22 June 2007.

35. "Ten Years Public Domain for the Original Web Software" (https://web.archive.org/web/20101116205636/http://tenyears-www.web.cern.ch/tenyears-www/Story/WelcomeStory.html). CERN. Archived from the original (http://tenyears-www.web.cern.ch/tenyears-www/Story/WelcomeStory.html) on 26 November 2010. Retrieved 21 July 2010.

36. "Welcome to info.cern.ch, the website of the world's first-ever web server" (http://info.cern.ch/). CERN. Retrieved 25 May 2008.

37. "World Wide Web—Archive of world's first website" (http://www.w3.org/History/19921103-hypertext/hypertext/WWW/TheProject.html). World Wide Web Consortium. Retrieved 25 May 2008.

38. "World Wide Web—First mentioned on USENET" (http://groups.google.co.uk/group/alt.hypertext/msg/06dad279804cb3ba?dmode=source&hl=en). 6 August 1991. Retrieved 25 May 2008.

39. "The original post to alt.hypertalk describing the WorldWideWeb Project" (https://groups.google.com/group/comp.archives/browse_thread/thread/9fb079523583d42/37bb6783d03a3b0d?lnk=st&q=&rnum=2&hl=en#37bb6783d03a3b0d). *Google Groups*. 9 August 1991. Retrieved 25 May 2008.

40. Van der Hiel, Amy (4 August 2016). "25 Years ago the world changed forever" (https://www.w3.org/blog/2016/08/25-years-ago-the-world-changed-forever). *W3C*. Retrieved 5 August 2021.

41. "80 moments that shaped the world" (https://web.archive.org/web/20160630220524/https://www.britishcouncil.org/80moments/?_e_pi_=7%2CPAGE_ID10%2C5655166218). British Council. Archived from the original (https://www.britishcouncil.org/80moments/?_e_pi_=7%2CPAGE_ID10%2C5655166218) on 30 June 2016. Retrieved 13 May 2016.

42. "Patent Policy—5 February 2004" (http://www.w3.org/Consortium/Patent-Policy-20040205/). World Wide Web Consortium. 5 February 2004. Retrieved 25 May 2008.

43. "Web inventor Tim Berners-Lee wants 'personal empowerment' for users, through his data startup" (https://www.bostonglobe.com/2020/12/29/business/web-inventor-tim-berners-lee-wants-personal-empowerment-users-through-his-data-startup/). *The Boston Globe*. 29 December 2020.

44. Klooster, John W., (2009), *Icons of Invention: the makers of the modern world from Gutenberg to Gates* (https://books.google.com/books?id=WKuG-VIwID8C&dq=tim+berners+lee++-+east+dorset+heritage+trust&pg=PA611), ABC-CLIO, p. 611.

45. Berners-Lee, T.; Hendler, J.; Lassila, O. (2001). "The Semantic Web". *Scientific American*. **2841** (5): 34. Bibcode:2001SciAm.284e..34B (https://ui.adsabs.harvard.edu/abs/2001SciAm.284e..34B). doi:10.1038/scientificamerican0501-34 (https://doi.org/10.1038%2Fscientificamerican0501-34).

46. "Tim Berners-Lee, World Wide Web inventor, to join ECS" (http://www.ecs.soton.ac.uk/news/658). World Wide Web Consortium. 2 December 2004. Retrieved 25 May 2008.

47. "Berners-Lee 'sorry' for slashes" (http://news.bbc.co.uk/1/hi/technology/8306631.stm). BBC. 14 October 2009. Retrieved 14 October 2009.

48. "Tim Berners-Lee" (http://www.w3.org/News/2009#item98). World Wide Web Consortium. 10 June 2009. Retrieved 10 July 2009.

49. "Ordnance Survey offers free data access" (http://news.bbc.co.uk/1/hi/technology/8597779.stm). *BBC News*. 1 April 2010. Retrieved 3 April 2009.

50. FAQ—World Wide Web Foundation (http://www.webfoundation.org/about/faq/). Retrieved 18 January 2011.

51. Ghosh, Pallab (15 September 2008). "Web creator rejects net tracking" (http://news.bbc.co.uk/2/hi/technology/7613201.stm). BBC. Retrieved 15 September 2008. "Warning sounded on web's future."

52. Cellan-Jones, Rory (March 2008). "Web creator rejects net tracking" (http://news.bbc.co.uk/1/hi/technology/7299875.stm). BBC. Retrieved 25 May 2008. "Sir Tim rejects net tracking like Phorm."

53. Adams, Stephen (March 2008). "Web inventor's warning on spy software" (https://web.archive.org/web/20080522025521/http://www.telegraph.co.uk/news/uknews/1581938/Web-inventor%27s-warning-on-spy-software.html). *The Daily Telegraph*. London. Archived from the original (https://www.telegraph.co.uk/news/uknews/1581938/Web-inventor%27s-warning-on-spy-software.html) on 22 May 2008. Retrieved 25 May 2008. "Sir Tim rejects net tracking like Phorm."

54. Berners, Tim (December 2010). "Long Live the Web: A Call for Continued Open Standards and Neutrality" (http://www.scientificamerican.com/article.cfm?id=long-live-the-web). *Scientific American*. Retrieved 21 December 2011.

55. "Vint Cerf, Tim Berners-Lee, and 19 other technologists pen letter asking FCC to save net neutrality" (https://venturebeat.com/2017/12/11/vint-cerf-tim-berners-lee-and-19-other-technologists-pen-letter-asking-fcc-to-save-net-neutrality/). VB News. Retrieved 14 December 2017

56. "State.com/about/people" (https://web.archive.org/web/20160303192300/https://state.com/about/people). Archived from the original (https://state.com/about/people) on 3 March 2016. Retrieved 9 September 2013.

57. Computing, Government (23 May 2012). "Government commits £10m to Open Data Institute" (https://www.theguardian.com/government-computing-network/2012/may/23/open-data-institute-plans-published-cabinet-office?newsfeed=true). *The Guardian*.

58. Gibbs, Samuel (7 October 2013). "Sir Tim Berners-Lee and Google lead coalition for cheaper internet" (https://www.theguardian.com/technology/2013/oct/07/google-berners-lee-alliance-broadband-africa?CMP=EMCNEWEML6619I2&et_cid=51918&et_rid=7107573&Linkid=http%3a%2f%2fwww.theguardian.com%2ftechnology%2f2013%2foct%2f07%2fgoogle-berners-lee-alliance-broadband-africa). *The Guardian*. Retrieved 8 October 2013.

59. Weinberger, David, "How the father of the World Wide Web plans to reclaim it from Facebook and Google" (http://www.digitaltrends.com/web/ways-to-decentralize-the-web/). *Digital Trends*, 10 August 2016. Retrieved 31 October 2016.

60. "Sir Tim Berners-Lee joins Oxford's Department of Computer Science" (http://www.ox.ac.uk/news/2016-10-27-sir-tim-berners-lee-joins-oxfords-department-computer-science#). UK: University of Oxford. 27 October 2016.

61. "Sir Tim Berners-Lee joins Oxford's Department of Computer Science and Christ Church" (http://www.chch.ox.ac.uk/news/research-and-academia/TBLpress-release). UK: Christ Church, Oxford. 27 October 2016. Retrieved 14 November 2016.

62. McCarthy, Kieren (6 March 2017). "Sir Tim Berners-Lee refuses to be King Canute, approves DRM as Web standard" (https://www.theregister.co.uk/2017/03/06/berners_lee_web_drm_w3c/). *The Register*. Situation Publishing. Archived (https://web.archive.org/web/20181005001244/https://www.theregister.co.uk/2017/03/06/berners_lee_web_drm_w3c/) from the original on 5 October 2018. Retrieved 30 May 2019.

63. Cardoza, Christina (7 July 2017). "DRM concerns arise as W3C's Tim Berners-Lee approves the EME specification" (https://sdtimes.com/digital-restrictions-management/drm-concerns-arise-as-w3cs-tim-berners-lee-approves-the-eme-specification/). *SD Times*. BZ Media LLC. Archived (https://web.archive.org/web/20190530183218/https://sdtimes.com/digital-restrictions-management/drm-concerns-arise-as-w3cs-tim-berners-lee-approves-the-eme-specification/) from the original on 30 May 2019. Retrieved 12 March 2019.

64. McCarthy, Kieren (18 September 2017). "DRM now a formal Web recommendation after protest vote fails" (https://www.theregister.co.uk/2017/09/18/w3c_approves_eme/). *The Register*. Situation Publishing. Archived (https://web.archive.org/web/20190227064708/https://www.theregister.co.uk/2017/09/18/w3c_approves_eme/) from the original on 27 February 2019. Retrieved 30 May 2019.

65. "Tim Berners-Lee project gives you more control over web data" (https://www.engadget.com/2018/09/30/tim-berners-lee-solid-data-control/). *Engadget*. Retrieved 30 September 2018.

66. "Exclusive: Tim Berners-Lee tells us his radical new plan to upend the World Wide Web=Fast Company" (https://www.fastcompany.com/90243936/exclusive-tim-berners-lee-tells-us-his-radical-new-plan-to-upend-the-world-wide-web). Retrieved 29 September 2018.

67. CNA Staff (25 November 2019). "Web inventor Tim Berners-Lee launches plan to stop Internet abuse" (https://www.channelnewsasia.com/news/world/web-inventor-tim-berners-lee-launches-plan-stop-internet-abuse-12123526). Archived (https://web.archive.org/web/20191125193812/https://www.channelnewsasia.com/news/world/web-inventor-tim-berners-lee-launches-plan-stop-internet-abuse-12123526) from the original on 25 November 2019. Retrieved 25 November 2019.

68. "Web inventor gets Queen's honour" (http://news.bbc.co.uk/1/hi/technology/6750395.stm). BBC. 13 June 2007. Retrieved 25 May 2008.

69. "Fellowship of the Royal Society 1660–2015" (https://web.archive.org/web/2015101518582 0/https://docs.google.com/spreadsheets/d/1RVVZY00MZNrK2YCTTzVrbTFH2t3RxoAZah1 28gQR-NM/pubhtml). London: Royal Society. Archived from the original (https://docs.google. com/spreadsheets/d/1RVVZY00MZNrK2YCTTzVrbTFH2t3RxoAZah128gQR-NM/pubhtml) on 15 October 2015.

70. "APS Member History" (https://search.amphilsoc.org/memhist/search?creator=Tim+Berners-Lee&title=&subject=&subdiv=&mem=&year=&year-max=&dead=&keyword=&smode=advan ced). search.amphilsoc.org. Retrieved 14 June 2021.

71. "Scientific pioneers honoured by The University of Manchester" (http://www.manchester.ac.u k/aboutus/news/display/?id=4216). manchester.ac.uk. 2 December 2008. Retrieved 28 May 2016.

72. "Yale awards 12 honorary degrees at 2014 graduation" (http://news.yale.edu/2014/05/19/yal e-awards-12-honorary-degrees-2014-graduation). Yale News, 19 May 2014. Retrieved 28 May 2016.

73. "Harvard awards 9 honorary degrees" (http://news.harvard.edu/gazette/story/2011/05/harvar d-to-award-nine-honorary-degrees/#berners-lee), Harvard Gazette, 26 May 2011. Retrieved 28 May 2016.

74. Davies, Caroline (5 October 2016). "New faces on Sgt Pepper album cover for artist Peter Blake's 80th birthday" (https://www.theguardian.com/artanddesign/2012/apr/02/peter-blake-s gt-pepper-cover-revisited). The Guardian.

75. "Sir Peter Blake's new Beatles' Sgt Pepper's album cover" (https://www.bbc.co.uk/news/ente rtainment-arts-17583026). BBC. 2 April 2012. Retrieved 9 November 2016.

76. "Sir Tim Berners-Lee Receives Inaugural Queen Elizabeth Prize for Engineering, 2013" (htt ps://webfoundation.org/2013/03/sir-tim-berners-lee-receives-inaugural-queen-elizabeth-priz e-for-engineering/). Web foundation.org. 18 March 2013.

77. "Frequently asked questions by the Press – Tim BL" (https://www.w3.org/People/Berners-Le e/FAQ.html#tell). www.w3.org. Retrieved 10 September 2020.

78. "Nancy Carlson Is Wed to Timothy Berners-Lee" (https://www.nytimes.com/1990/07/15/style/ nancy-carlson-is-wed-to-timothy-berners-lee.html). The New York Times. 15 July 1990. Retrieved 22 June 2018.

79. "Ms Rosemary Leith and Sir Tim Berners-Lee are delighted to announce that they celebrated their marriage on 20 June 2014...." (http://webfoundation.org/tim-berners-lee-marr ied-rosemary-leith/) World Wide Web Foundation.

80. "Rosemary Leith" (https://webfoundation.org/about/board/rosemary-leith/). World Wide Web Foundation. Retrieved 23 June 2018.

81. "VC firm Glasswing names Jibo, John Hancock execs to advisory board" (https://www.bizjou rnals.com/boston/news/2018/05/08/vc-firm-glasswing-names-jibo-john-hancock-execs-to.ht ml). www.bizjournals.com. 8 May 2018. Retrieved 22 June 2018.

82. "Faces of the week" (http://news.bbc.co.uk/2/hi/uk_news/magazine/3142618.stm). 26 September 2003 – via news.bbc.co.uk.

83. Döpfner, Mathias. "The inventor of the web Tim Berners-Lee on the future of the internet, 'fake news,' and why net neutrality is so important" (https://www.businessinsider.com/mathia s-dopfner-tim-berners-lee-world-wide-web-interview-2017-5). Business Insider. Retrieved 24 December 2019.

84. "NFT representing Tim Berners-Lee's source code for the web to go on sale" (https://www.th eguardian.com/artanddesign/2021/jun/15/nft-representing-tim-berners-lee-source-code-worl d-wide-web-sale-auction). theguardian.com. theguardian.com. 15 June 2021. Retrieved 15 June 2021.

85. "This Changed Everything: Source Code for WWW x Tim Berners-Lee, an NFT" (https://www.sothebys.com/en/buy/auction/2021/this-changed-everything-source-code-for-www-x-tim-berners-lee-an-nft/source-code-for-the-www). *sothebys.com*. sothebys.com. Retrieved 15 June 2021.

86. "The web's source code is being auctioned as an NFT by inventor Tim Berners-Lee" (https://www.cnbc.com/2021/06/15/web-nft-source-code-is-being-auctioned-by-inventor-tim-berners-lee.html). cnbc.com. cnbc.com. 15 June 2021. Retrieved 15 June 2021.

87. Lawler, Richard (30 June 2021). "Sir Tim Berners-Lee's web source code NFT sells for $5.4 million" (https://www.theverge.com/2021/6/30/22557765/www-nft-tim-berners-lee-sothebys-source-code). *The Verge*. VOX Media. Retrieved 30 June 2021.

Further reading

- *Tim Berners-Lee's* publications (https://web.archive.org/web/20171109232547/http://www.w3.org/People/Berners-Lee/Publications.html)
- *Tim Berners-Lee and the Development of the World Wide Web (Unlocking the Secrets of Science)* (Mitchell Lane Publishers, 2001), ISBN 1-58415-096-3
- *Tim Berners-Lee: Inventor of the World Wide Web (Ferguson's Career Biographies)*, Melissa Stewart (Ferguson Publishing Company, 2001), ISBN 0-89434-367-X children's biography
- *How the Web was Born: The Story of the World Wide Web*, Robert Cailliau, James Gillies, R. Cailliau (Oxford University Press, 2000), ISBN 0-19-286207-3
- *Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web by Its Inventor*, Tim Berners-Lee, Mark Fischetti (Paw Prints, 2008)
- "Man Who Invented the World Wide Web Gives it New Definition" (http://computemagazine.com/man-who-invented-world-wide-web-gives-new-definition/), *Compute Magazine*, 11 February 2011
- BBC2 Newsnight – Transcript of video interview of Berners-Lee on the read/write Web (http://news.bbc.co.uk/2/hi/technology/4132752.stm)
- *Technology Review* interview (http://www.technologyreview.com/Infotech/13784/)
- Brooker, Katrina (August 2018). " "I Was Devastated": Tim Berners-Lee, the Man Who Created the World Wide Web, Has Some Regrets" (https://www.vanityfair.com/news/2018/07/the-man-who-created-the-world-wide-web-has-some-regrets). *Vanity Fair*.

External links

- Tim Berners-Lee (https://www.ted.com/speakers/tim_berners_lee) at TED
- Tim Berners-Lee (https://www.imdb.com/name/nm3805083/) at IMDb
- Works by or about Tim Berners-Lee (https://worldcat.org/identities/lccn-no99-10609) in libraries (WorldCat catalog)
- Tim Berners-Lee (http://www.w3.org/People/Berners-Lee/) on the W3C site
- List of Tim Berners-Lee publications (https://www.w3.org/People/Berners-Lee/Publications.html) on W3C site
- First World Wide Web page (http://www.w3.org/History/19921103-hypertext/hypertext/WWW/TheProject.html)
- Interview with Tim Berners Lee (http://videolectures.net/iswc06_lee_itbl/)
- Tim Berners-Lee: "The next Web of open, linked data" – presented his Semantic Web ideas about Linked Data (2009), Ted Talks. (https://www.youtube.com/watch?v=OM6XIICm_qo) on YouTube
- Appearances (https://www.c-span.org/person/?42432) on C-SPAN