

Not everybody loves Raymond

- [Internet Desk](#)



(Left) Shiva Ayyadurai and (right) Ray Tomlinson

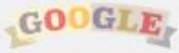
After tech pioneer Ray Tomlinson's death on March 6, a can of worms regarding who truly was the inventor of email was reopened on Twitter

Yesterday, the internet was abuzz with the death of a certain Raymond 'Ray' Tomlinson, who major papers such as *The Guardian*, *The New York Times* and *Fortune* cited as the founder/inventor of email.

Gmail, google's electronic mail software, paid tribute on Twitter acknowledging him "for inventing email and putting the @ sign on the map."



What is ironic though is if you were to Google (at the time of writing this story) 'Who invented email' or 'who is the inventor of email', you would get one of these results:



who invented email



All News Images Videos Apps More Search tools

About 6,00,00,000 results (0.61 seconds)

VA Shiva Ayyadurai

The Washington Post: **VA Shiva Ayyadurai**: Inventor of Email honored by Smithsonian. **VA Shiva Ayyadurai** invented Email at the age of 14 at 1978. He spoke with The Post's Emi Kolawole about his path from being a teenage inventor in New Jersey to the Smithsonian.

[VA Shiva Ayyadurai, The Inventor of Email | Inventing Email](http://vashiva.com/inventing_email.asp)
vashiva.com/inventing_email.asp



Feedback



who is the inventor of email



All News Images Videos Maps More Search tools

About 2,54,00,000 results (0.63 seconds)

Shiva Ayyadurai

An Indian-born scientist is waging a campaign for recognition as the 'child inventor' of email. **Shiva Ayyadurai**, a 50-year-old United States-based bio-scientist, has published a book challenging claims that the American computer programmer **Ray Tomlinson** invented email and asserting his own claim as its creator. Sep 5, 2014



[Did a 14-year-old Indian boy invent email? - Telegraph](http://www.telegraph.co.uk/.../Did-a-14-year-old-Indian-boy-invent-email.html)
www.telegraph.co.uk/.../Did-a-14-year-old-Indian-boy-invent-email.html

Feedback

So what gives? Who really invented the electronic mail? Ray or Shiva?

The facts as we know it are as follows:

- 1) Ray Tomlinson has been peer-credited with writing a program in 1971 — for ARPANET, the precursor of the Internet — so people sitting on different computer terminals could send each other simple text messages.
- 2) What Ayyadurai claims is that he, as a 14-year-old in 1978 (a full seven years AFTER Tomlinson's creation), wrote a program that replicated the features of the paper mail system and came with a user-friendly interface that we are most familiar with today ('Inbox', 'Outbox', 'Drafts', 'Subject', 'Cc:', 'Bcc:' etc). And it is precisely this, according to him, that distinguishes his invention from earlier primitive methods of electronic communication.

Here's the problem with interpreting both the above statements:

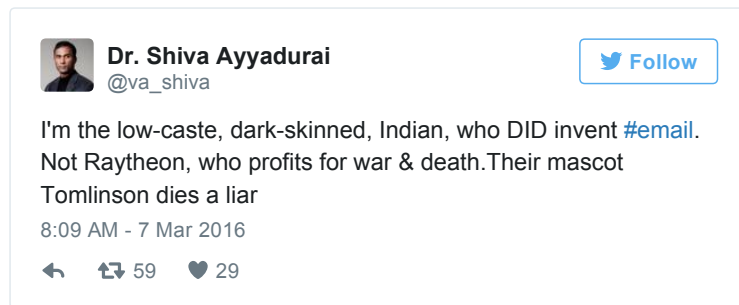
First, if we were to strip down the definition of electronic mail to its bare bones, then what we understand is simply: sending a message from one computer to another. That's what ARPANET was established for in the late 1960s — simple networking.

Back then, every university in the US had its own interconnected network, that used a common server, and it was possible to share information between different terminals that were connected through it. In fact, in 1965, when Tomlinson was still a student at the Massachusetts Institute of Technology (MIT), two programmers from the same institution — Tom Van Vleck and Noel Morris — “wanted to send each other electronic messages, and created the e-mail program MAIL.” Just how primitive was it though? As the *NYT* [puts it](#): “Users accessed the computer at remote terminals — modified electric typewriters — that sent input to the computer and printed output on paper as the user typed code.”

Now, keep in mind that all this was possible for the users WITHIN the MIT. There was no way they could send a message to their colleagues at say, at Stanford or Caltech. This is where Tomlinson's program made the difference. He wrote a program that made possible communication between different servers through the use of the @ symbol. So, a Dave from MIT could send an email to Mike at Caltech (different servers) by simply sending a mail to mike@caltech.edu.

Fast forward to the 1980s, and what Shiva Ayyadurai has in hand is a COPYRIGHT to a program called 'EMAIL' (in all caps, mind you; the world 'email' is used both as a noun and a verb) which does the job of replicating a paper-based mail system. More importantly, a copyright is not the same as a patent. And patents at that time were not handed out for software.

But after Tomlinson's death on March 6, 2016, Ayyadurai had this to say:



Full disclosure: This very paper has on multiple occasions, mentioned Shiva Ayyadurai as the inventor of the email.

But we can definitely conclude certain things:

- 1) There is no ONE inventor of the email. It was built upon improvement after improvement ever since ARPANET came into being. MIT's own newspaper in an [article published in 2012](#) about Ayyadurai issued the following clarification:

"This brief incorrectly titled Shiva Ayyadurai and credits him with the first copyright to email. He is a faculty lecturer. Also, while he holds a copyright from 1982 titled "EMAIL," Ayyadurai is not the inventor of email, which began in the 1960s."

- 2) What distinguishes Ray Tomlinson from the rest is the fact that he was the one who put the '@' in your email and therefore enabled communication across different servers.

- 3) A copyright is most certainly not the same as a patent (and definitely doesn't implicitly interpret as an invention).

Here's the [Washington Post's article about Ayyadurai](#) in which they prominently issue a sizeable clarification at the start.

Speaking to *The Hindu* over the phone, Ayyadurai said he never claimed to have invented electronic messaging but an 'inter-office, inter-organizational paper-based mail system' that we are most familiar with today. "If we wanted to find out what was truly the first electronic messaging system, then it was morse code."

On the copyright issue, Ayyadurai said:

"Up until 1976 (in the US), copyright was only available for safeguarding works of music or novels. It was only in 1980 that the Copyright Act was amended to include software. The Supreme Court wasn't recognising patents for software until the late 80s or early 90s."

Ayyadurai claimed Raytheon BBN (the company where Tomlinson worked when he wrote his program) benefitted the most from this issue and their massive PR campaign has led to several articles about him being pulled down or clarified. "Raytheon advertises in publications like

the Huffington Post and CNN," he said.

Providing a counterpoint to articles that he believed were going against him, Ayyadurai pointed to a story that came out on *CBS* last year by Mo Rocca that backed his claim. He further sent a link to a [story on Wired magazine](#) that said Noam Chomsky, the professor emeritus of linguistics and philosophy at MIT, put "his weight behind V.A. Shiva Ayyadurai" as the inventor of the email.

"I was invited last year by the *Wall Street Journal* to write an essay for the 125th Anniversary Issue, as the Inventor of Email. Tomlinson was NOT," Ayyadurai wrote over a direct Twitter message, providing a link to the story.

Regarding Tomlinson's role in the debate, Ayyadurai said: "He did something he can take credit for creating rudimentary text messaging." He added that if he "was a white guy and had a copyright for email, I would have my photo on every stamp in the world."

Printable version | Mar 7, 2016 7:42:38 PM | <http://www.thehindu.com/sci-tech/technology/who-invented-email-ray-tomlinson-or-shiva-ayyadurai/article8323987.ece>

© The Hindu