

Cracking into the Mind of Alan Turing

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Junior Division

Individual Historical Poem

Student-composed Words: 1591

Alan Turing was a British code cracker and mathematician that broke the barrier of technology by designing a foundation for the first computer. His work not only helped break the Enigma code in the 1940s but also carried on to make an immense impact in our modern day society.

World War II, the Germans have the advantage
Used to transport all their messages, insane to manage
A secret Enigma code, considered impossible to crack
But don't worry Allies, Turing's got our back

With a scholarship to Cambridge and in only seven years he showed
That at just 31 he could already crack the code¹
With his computer-like machine, finding common phrases
He was able to end the war by an estimated two years early
Saving a projected 14 million lives, surely

Mathematician, cipher, codebreaker
Unfortunately ahead of his time
Society wasn't ready for his brilliant troubled mind
The British government quieted him to silence
His contributions went long unnoticed
Until 2019, 65 years after his last breath
The New York Times published the obituary of his death

His government's interference
With the way he lead his life
Forced him to take hormonal chemicals
Simply for being gay
Drove him to cut his time with us
In a horrid and horrendous way

He was not honored as a hero,
But treated like a beast
Viewed through society's eyes
As a disgusting animal, worth the very least

A passion for artificial intelligence
A kind, good-hearted soul,
Once in love with his work

¹ "Alan Mathison Turing." Encyclopedia of World Biography Online, Gale, 1998.

His tremendous accomplishments untold
His mind wasted as the treatments took their hold

The father of computers
Who gave us the start
And how did we thank him?
By breaking his heart.

From 1939 to 1945
The world was at war
The Allies against the Axis
There was no peace, not anymore

The British are with America, Russia and France
But there is one thing in the way
A classified code
Stopping all the Allies' chance

The code contained secret messages
About everything the Germans planned
Their attacks, whereabouts, and conversations
But impossible to understand

The code changed every day
With over 15 quintillion possibilities²
Only 24 hours to solve
Before it would restart again
And all their work would dissolve

A small group of the wise
Working towards a common goal
But no one seemed to be getting anywhere
After two years had passed in full

But Turing was trying something different
Unlike what many of the others were attempting
Instead of looking at the broken messages
He was building a machine.

A machine that would crack the code.

² "Computers: The Dawn of a Revolution." Science and Its Times, edited by Neil Schlager and Josh Lauer, vol. 6, Gale, 2001.

The Turing machine, Colossus
Made from 1,500 vacuum tubes³
Able to understand the Enigma
Read the message to decode it
Using a system of zeros and ones
Leaving the rest of the group stunned

Now they played God
Though they knew when the attacks would hit,
They couldn't stop them all,
Or the Germans would know they'd cracked it

The Germans had a new system every morning
But the British couldn't use haste
So they used their toughest judgement
Or two years would've gone to waste.

Decided what attacks to stop
And what to let through
Determined who lived
And who died
As they watched from the outside.

The war finally ended
the Allies victories did persist
But the British government
Decided to pretend Turing's part in it didn't exist

Turing and his group went back into the shadows
And he began his work as deputy director
At Manchester a new beginning
While the Allies celebrated winning

He tried making machines that would use computer programs⁴
for non-computing activities
Instead of calculations that were stored
It played games and chess, so he never was bored

³ "Institute for Advanced Study Computer." *Smithsonian Primary Sources in U.S. History*, Gale, 2016.

⁴ "The Development of Computational Mathematics." *Science and Its Times*, edited by Neil Schlager and Josh Lauer, vol. 6, Gale, 2001.

Then he began to write his papers
On how the machine mind
Could be more than a human's
It could be better, and even almost kind.

His papers were considered breakthroughs,
proposing ideas about theoretical machines
Testing the true potential and limitations
Of his new artificial dreams

He wanted to test boundaries further
With his paper "Can Machines Think?"⁵
Breaking every single barrier
With his mind working as quick as a wink

Technology had never reached quite that level
Computers hardly able to do one basic task
And he took that world by storm
Using all his new data to inform

But he certainly wasn't done yet
Now he made Turing tests⁶
Proving if machines could have the same intelligence as humans
Taking quite the incredible steps

Into an unknown territory no one had done before,
Instead of attempting to mimic human actions
Choosing to program through stored programs
Going in whole new directions

His new design
Was the first of many
And that would eventually become
The foundation for our very own technology

They say he made the first computer
With his designs and discoveries

⁵ "Alan Mathison Turing." Encyclopedia of World Biography Online, Gale, 1998.

⁶ Danielson, Peter. "Turing Tests." Encyclopedia of Science, Technology, and Ethics, edited by Carl Mitcham, vol. 4, Macmillan Reference USA, 2005, pp. 1985-1986.

If only he was able to work on them more
For that we owe many apologies

It took us roughly 35 more years
Before Apple released their first computer
And another 44 to get to today
Where changes are still being made

Yet we will still have Turing to thank
For breaking the barrier
Of technology and computers
And for not leaving us in the blank

But only a couple of years later
We arrested him
And put him on trial in 1952
For Gross Indecency,⁷
Nothing he could undo

He pleaded guilty for everything
But still faced punishment
He could choose either of the given,
chemical therapy
Or time in prison

So he agreed to the treatments
To 'fix' being gay
But instead they did the opposite
he was actually beginning
To slip away

He stopped being able to code
Had to discontinue his work
Gave up everything he loved
And his world went dark

The medicine ruined his brain
Left him tattered and in pieces
Causing him tremendous amounts of pain
For not even a valid reason

⁷ *Alan Turing's Trial, 1952,*

Expect for what society said
Was disgusting and a crime
So when he couldn't take it anymore
He turned to cyanide

June 7th, 1954
He took a bite of an apple
And fell to the floor

He made his way to his bed
Where he lied down for the very last time
his body began shutting down
And he began to close his mind

Once one of the brightest in the world
A truly good person
Who got nothing of what he deserved

His depression consumed him
For he had no more will
As he lied there in bed
Letting himself be killed.

His death was ruled a suicide
From his depression
Caused by his treatments
And society moved on
Unaware of his achievements

His impacts went unnoticed
For a number of years
No one knew his help in the war
Or the lives he was able to spare

His work with computers
Made the biggest impact
Set up the foundation
For future engineers
But also let them use their imagination

Technology was simplistic
Before Turing came around
His philosophies of artificial intelligence

Were ones to astound

He changed the game
Of computers and programming
And even made improvements
To math logic, algebra, statistics, and morphogenesis⁸

He made the first ever attempt
For a computer to do non-computer tasks,
Even trying to translate other languages,
Having quite the blast

Long after his death
His work is still studied
By every computer science undergrad
And anyone who wants to go down that path

His Turing tests raised many philosophical questions
That even today still excites with possibilities⁹
And gives the puzzler
what seems to be endless abilities

Of questions to be answered
And things to be tested
None which made possible
Until the breakthrough
Of Turing
Who was ever so invested

He even got an award¹⁰
Named after him
Given every single year
To a brightest new kin

Given by the Association for Computing Machinery
The highest technical award
Presented to the individual with lasting and biggest importance

⁸ "Alan Mathison Turing." Encyclopedia of World Biography Online, Gale, 1998.

⁹ Kelkar, Shreeharsh. "How Influential Was Alan Turing? The Tangled Invention of Computing (and Its Historiography)."

¹⁰ "Turing Award." *Wikipedia*, Wikimedia Foundation, 15 Dec. 2019,

To the computer and technology field
Anyone willing to go the distance

Considered the Nobel Prize of computing
A cash prize of a million dollars
Keep the world moving
And remembering Turing

His career was cut short
Who knows the impact he could've made
A man once filled with passion
If only the world had shown him some more
compassion

His tragic tale
Is one to be remembered
Of how cruel society can be
Without any fail

Although he went unappreciated
Back in his time
The world is forever grateful
For when he was in his prime

We owe so much to this man
Who did so much for the war
And advancement our technological state
To whom we gave so much hate

He died when he was only 41 years old
For he still he had lifetime ahead of him
If only we hadn't acted so cold

His legacy will carry on
As one of the most brilliant minds
To ever walk this earth
And so we have to remind

To the new upcoming generations
Of the man who started it all
The father of our computers
To whom we recall

His ashes are spread
All over our ground
To remind us
That he's sticking around

His body was cremated
Shortly after his death
But his memory will stay with us
As one of the best of the best

Gone but not forgotten,
His work will stand tall
Just as his memorials and statues
That will never fall

We thank this world
For the man Alan Turing
For everything that he's done
And all the million hearts that he has won

Works Cited

Primary Sources

"Alan Turing, 1912–1954. The British mathematician was noted for his contributions to mathematical..." Encyclopedia of Science, Technology, and Ethics, edited by Carl Mitcham, vol. 4, Macmillan Reference USA, 2005. Gale In Context: U.S. History, <https://link.gale.com/apps/doc/PC3434987370/UHIC?u=ceda94204&sid=UHIC&xid=a4c25d78>. Accessed 5 Nov. 2019.

This is a photograph of Alan Turing. This photo of Alan Turing showed me the struggle and brilliance in Turing's eyes. It helped me understand him better. I used this photo to gain more background on what Alan Turing looked like.

Alan Turing's Report from Washington, 1942, www.turing.org.uk/sources/washington.html.

This is a report that Alan Turing wrote on Washington. I learned how he would write and talk by being able to read his words. I used it to express his voice and opinions in my poem.

Alan Turing's Trial, 1952, www.turing.org.uk/sources/sentence.html.

This is a photograph of Turing's trial. I learned about what he was charged for and the verdict. I will use this to show his 'downfall' and why he began the treatments that drove him to suicide.

Computers and Minds, Manchester 1949, www.turing.org.uk/sources/wmays1.html.

This was a paper that Alan Turing wrote. This helped me understand how he saw computers and his interest in artificial intelligence. I will use it to explain his interest in computers and why he dedicated his life to making them.

"Institute for Advanced Study Computer." *Smithsonian Primary Sources in U.S. History*, Gale, 2016. *Smithsonian Primary Sources in U.S. History*,
<https://link.gale.com/apps/portal/PRFJYR966251761/SMPS?u=ceda94204&sid=SMPS&xid=232421ab>. Accessed 26 Nov. 2019.

This is a photograph and caption about the Turing machine. It helped me get a visual on what his machine looked like. I will use it to gain background information.

Turing, Alan: Mathematician. ProQuest, Ann Arbor, 2016. *sirsdiscoverer*,
<https://explore.proquest.com/sirsdiscoverer/document/2256148516?accountid=4030>.

This is a photograph of Alan Turing. It helped be better understand what he looked like and provided a visual to me. I will use this as background information as what he looked like.

Secondary Sources

"Alan Mathison Turing." *Encyclopedia of World Biography Online*, Gale, 1998. *Gale In Context: U.S. History*,
<https://link.gale.com/apps/doc/K1631006606/UHIC?u=ceda94204&sid=UHIC&xid=f7d190c9>. Accessed 5 Nov. 2019.

This is an encyclopedia source. I used it to gain information and background on Alan Turing. I used it to help give background information to the reader about Turing and his life.

"Alan Turing." *Science and Its Times*, edited by Neil Schlager and Josh Lauer, vol. 6, Gale, 2000. *Gale In Context: U.S. History*,

<https://link.gale.com/apps/doc/K2643413021/UHIC?u=ceda94204&sid=UHIC&xid=7d0e1428>. Accessed 5 Nov. 2019.

This is a website about Alan Turing. I learned about his improvements and contribution to science in his time. I used it to learn more about science in his era and to explain how the science was 70 years ago.

"Computers: The Dawn of a Revolution." *Science and Its Times*, edited by Neil Schlager and Josh Lauer, vol. 6, Gale, 2001. *Gale In Context: U.S. History*,

<https://link.gale.com/apps/doc/CV2643450616/UHIC?u=ceda94204&sid=UHIC&xid=3fc8cbec>. Accessed 4 Nov. 2019.

This is a website. I learned about computers during the 1940s and how it was greatly improved. I will use this source to explain and show how computers were 70 years ago.

Danielson, Peter. "Turing Tests." *Encyclopedia of Science, Technology, and Ethics*, edited by Carl Mitcham, vol. 4, Macmillan Reference USA, 2005, pp. 1985-1986. *Gale In Context: U.S. History*,

<https://link.gale.com/apps/doc/CX3434900698/UHIC?u=ceda94204&sid=UHIC&xid=64add3ac>. Accessed 5 Nov. 2019.

This is an encyclopedia page about Turing tests. This helped me understand what a Turing test is and its significance to technology. I will use this to explain how he created the Turing tests and what they are used for.

"The Development of Computational Mathematics." *Science and Its Times*, edited by Neil Schlager and Josh Lauer, vol. 6, Gale, 2001. *Gale In Context: U.S. History*,

<https://link.gale.com/apps/doc/CV2643450622/UHIC?u=ceda94204&sid=UHIC&xid=680de215>. Accessed 4 Nov. 2019.

This is a website about technology and the impacts Turing had on it. I used this to understand and learn more about what computers were capable of in the 40s, and how Turing improved them. I will use this source to show what technology was like and Turing's impact on it.

Kelkar, Shreeharsh. "How Influential Was Alan Turing? The Tangled Invention of Computing (and Its Historiography)." *Platypus*, blog.castac.org/2015/03/how-influential-was-turing/.

This is a website about the influences of Turing. It helped me learn the short term and long term impacts of his work. I will use it to explain his impact on history long after his time.

"Turing Award." *Wikipedia*, Wikimedia Foundation, 15 Dec. 2019, en.wikipedia.org/wiki/Turing_Award.

This is a website about the Turing award. It helped me understand the impacts of Alan Turing after his death. I used to show how Turing still impacts our world after his death close to seventy years ago.

