

FLEYDO ENGLISH SCHOOL

Story Material

The Algorithm

A gripping story about a teenage coder who builds a deepfake detection tool and must choose between money and open access.

Level: B1 (Intermediate)

Skill: Reading

Duration: ~45 minutes

Age Group: Teens (11-16)

Topic: Technology & Ethics

Pages: 14 story pages

The Story

Chapter I— The Girl Who— Saw Through Screens

Zoe Park had been writing code since she was eleven. While her classmates spent their evenings on social media, Zoe spent hers in front of two monitors in her bedroom, building things: apps, games, websites, **algorithms** that solved problems nobody else had thought to solve. Her parents — her mother was a nurse, her father drove a delivery van — did not entirely understand what she did, but they recognised the intensity in her eyes when she worked. It was the same look her mother had when she was handling an emergency. Focus. Purpose. Certainty.

The idea that changed everything came on a Tuesday in October, during a normal school day that became anything but normal. A video appeared on the school's unofficial social media group showing Mr. Hadley, the deputy head, apparently shouting racial abuse at a student in an empty classroom. The video spread through the school in minutes. Students were furious. Parents called to complain. Mr. Hadley was suspended pending investigation.

But Zoe noticed something that nobody else did. She downloaded the video and examined it frame by frame on her computer. The lighting was wrong — shadows fell in two different directions. Mr. Hadley's lip movements did not perfectly match the audio. And there was a faint, rhythmic pattern in the background noise that Zoe recognised from her work with audio processing: the signature of AI-generated speech synthesis. The video was a **deepfake** — a sophisticated piece of **manipulation** created using **artificial intelligence**. Someone had taken real footage of Mr. Hadley and altered it to make him appear to say things he had never said.

Zoe reported her findings to the headteacher, who brought in a forensic analyst. The analyst confirmed everything. Mr. Hadley was cleared and reinstated. The student who had created the deepfake — using freely available software — was identified and excluded. But the damage had been done. Mr. Hadley's reputation had been shattered in the time it took to share a link. And Zoe could not stop thinking: if she had not noticed, nobody would have. The fake would have become the truth.

Chapter II— Building the Detector

That night, Zoe began building. She knew that if one student at one school could create a convincing deepfake, then millions of people worldwide were already being deceived by them every day — in politics, in journalism, in personal relationships. The tools to create fakes were becoming cheaper and easier. The tools to detect them were lagging far behind. She decided to close the gap.

Her approach was elegant. She trained a machine-learning **algorithm** on a dataset of ten thousand images — half genuine, half manipulated — teaching it to recognise the tiny imperfections that deepfakes left behind: inconsistencies in pixel patterns, unnatural compression artefacts, subtle errors in facial geometry that the human eye could not detect

but mathematics could. She worked every evening for three weeks, refining the model, testing it against increasingly sophisticated fakes, and improving its accuracy from 72 percent to 94 percent.

The result was a working **prototype**: a browser extension that could analyse any image or video on a webpage and display a confidence score — green for likely authentic, amber for uncertain, red for likely manipulated. She called it TruthLens.

She showed TruthLens to Mr. Okoro, her computer science teacher, who stared at the screen for a long time before speaking. "Zoe, do you understand what you have built?" he said quietly. "This is not a school project. This is a tool that governments and media organisations would pay millions for." Zoe shrugged. "I just wanted to stop what happened to Mr. Hadley from happening to other people." Mr. Okoro helped her enter TruthLens into the National Young Innovators Competition. She won first place. The prize included mentorship from tech industry professionals and an invitation to present at the London Digital Ethics Conference.

The presentation went better than she could have imagined. She demonstrated TruthLens live, feeding it a series of images — some real, some AI-generated — and watching the audience gasp as the tool correctly identified every fake with 96 percent accuracy. The video of her talk was uploaded to the conference website. Within forty-eight hours, it had gone **viral**. Two million views. Thousands of comments. And one email that would change everything.

Chapter III— The Offer

The email was from Marcus Chen, Chief Technology Officer of NexaTech, one of the largest social media companies in the world. NexaTech's platforms had three billion users. Their advertising revenue exceeded forty billion dollars annually. Marcus wanted to meet Zoe to discuss "a potential partnership of mutual benefit." Zoe's parents were cautious, but Mr. Okoro encouraged her. "Hear what they have to say. Knowledge is never wasted." They travelled to NexaTech's European headquarters in King's Cross — a glass tower filled with beanbags, free coffee, and people in expensive trainers.

Marcus Chen was charming, articulate, and impeccably dressed. He praised Zoe's work, called her "the most talented young developer I have met in twenty years," and offered her a deal: NexaTech would acquire the TruthLens technology for 1.2 million pounds. They would also offer Zoe a scholarship to any university of her choice and a guaranteed position at NexaTech after graduation. In return, they wanted full **intellectual property** rights — including a **patent** that would give NexaTech exclusive control over the technology.

"What would you do with TruthLens?" Zoe asked. Marcus smiled. "We would integrate it into our platforms. Imagine — every image on NexaTech automatically verified for **authenticity**. We would be the first social media company to offer built-in deepfake detection. It would be revolutionary." It sounded perfect. But something felt wrong. Zoe noticed that the contract contained a clause she almost missed: "The Acquirer reserves the right to determine the deployment timeline and scope of the Technology at its sole

discretion." In plain English: NexaTech could buy TruthLens and choose never to release it.

On the train home, Zoe sat in silence while her mother talked excitedly about university scholarships. Mr. Okoro, who had come as an adviser, watched Zoe's face. "You are not happy," he said. "Why would they buy a tool to detect fake content," Zoe said slowly, "if their business model depends on people sharing content without thinking about whether it is real? Every fake image that goes **viral** on their platform generates advertising revenue. TruthLens would reduce sharing. It would cost them money." Mr. Okoro nodded. "So what are you going to do?"

Chapter IV— The Investigation

Chapter V— The Decision

Instead of accepting or rejecting the offer, Zoe investigated. She spent two weeks researching NexaTech's history with content moderation. What she found was disturbing. The company had acquired four similar technologies in the past six years — tools designed to detect **misinformation**, filter harmful content, and verify image **authenticity**. In every case, the technology had been quietly shelved after acquisition. None had ever been deployed on NexaTech's platforms.

She also discovered that NexaTech's largest advertising clients included political organisations and marketing firms that routinely used manipulated images in their campaigns. These clients spent hundreds of millions on NexaTech advertising. A tool that flagged their content as potentially fake would threaten those contracts. The pattern was clear: NexaTech was not buying innovation to use it. They were buying it to bury it.

Zoe shared her findings with Mr. Okoro. His face was grave. "You are describing a company that is actively undermining **transparency** for profit. That is not just an **ethics** problem — it is a public safety problem." He paused. "But Zoe, they are a billion-dollar corporation with a legal team the size of a small army. What can one sixteen-year-old do?"

Zoe made her decision on a Sunday morning, sitting at her desk with a cup of tea and the weight of 1.2 million pounds pressing on her conscience. She opened her laptop and did three things. First, she emailed Marcus Chen a polite but firm rejection: "Thank you for the offer. I have decided to pursue an alternative path for TruthLens that is more consistent with my values."

Second, she uploaded the complete TruthLens source code to a public repository under an **open-source** licence. This meant that anyone — any developer, any organisation, any government — could download, use, modify, and improve the technology for free. NexaTech could not patent what was already public. The code belonged to everyone.

Third, she published a detailed blog post explaining her reasons: the meeting with NexaTech, the contract clause, her research into the company's history of acquiring and suppressing detection tools, and her belief that technology designed to protect the public should never be controlled by a single corporation. She added **encryption** recommendations and a user guide. She called the post "Why I Turned Down a Million Pounds."

Chapter VI— The Fallout

The response was immediate and divided. NexaTech's legal department sent Zoe a letter accusing her of breaching confidentiality and "making defamatory statements." Marcus Chen gave an interview calling her claims "misleading and irresponsible." Technology journalists debated whether a sixteen-year-old had the right to make accusations against a major corporation. But the public sided overwhelmingly with Zoe. Her blog post was read by five million people in its first week. Developers around the world downloaded TruthLens and began improving it — adding support for video analysis, foreign languages, and real-time detection.

A group of investigative journalists at a national newspaper followed up on Zoe's research and confirmed her findings about NexaTech's pattern of acquiring and suppressing detection tools. Their front-page story, headlined "The **disinformation** machine: how NexaTech buried the tools that could have protected you," forced the company to issue a public response. **Accountability** was no longer optional.

A parliamentary committee invited Zoe to give evidence. She sat in front of twelve Members of Parliament in a wood-panelled room in Westminster and explained, calmly and precisely, how deepfake technology worked, why detection tools were essential, and why allowing corporations to control those tools was dangerous. "Every person has the right to know whether what they are seeing is real," she said. "That is not a privilege. It is a basic requirement of a functioning democracy. **Digital literacy** starts with **transparency**."

The committee recommended new legislation requiring social media platforms to integrate independent content verification tools and to publish regular **transparency** reports on manipulated content. It was not everything Zoe had hoped for, but it was a beginning. NexaTech, under mounting public and regulatory pressure, announced that it would adopt an "open verification framework" — a significant, if reluctant, shift in policy.

Chapter VII— The Ripple Effect

Chapter VIII— The Question

Within six months of going open-source, TruthLens had been downloaded over two million times. Independent developers had created versions for every major browser, mobile platform, and operating system. Universities incorporated it into **digital literacy** courses. News organisations used it to verify images before publication. Three governments adopted it as part of their election integrity programmes.

Zoe did not become rich. She did not become a celebrity. She went back to school, finished her GCSEs, and continued coding in her bedroom every evening. But something had changed. Other young developers, inspired by her example, began releasing their own tools — for detecting fake reviews, identifying bot accounts, and tracking the spread of **misinformation** across platforms. A community had formed, connected by a shared belief that technology should serve people, not manipulate them.

Mr. Okoro, watching from the staffroom, allowed himself a rare smile. "I have been teaching for twenty-two years," he told a colleague. "I have never had a student who understood so clearly that the most powerful thing you can do with knowledge is give it away."

On the last day of the school year, Zoe gave a talk to the sixth form. She did not talk about code or algorithms or corporate politics. She talked about trust. "Every time you share an image without checking whether it is real, you are making a choice," she said. "Every time a company hides information to protect its profits, it is making a choice. Every time a government fails to regulate technology that can be used to deceive, it is making a choice. The question is not whether technology is powerful. It obviously is. The question is: who gets to decide how that power is used?"

She looked around the room — at students who would become doctors, teachers, engineers, politicians, parents. "You do," she said. "We all do. And the first step is learning to see clearly. Not through filters. Not through algorithms designed to keep you scrolling. But clearly. That is what **digital literacy** really means. It means choosing truth, even when lies are easier."

The room was quiet for a moment. Then someone at the back started clapping, and the whole room followed.

Key Vocabulary

Term	Definition
Algorithm	A set of rules or steps a computer follows to solve a problem
Artificial Intelligence	Computer systems designed to perform tasks that normally require human thinking
Deepfake	A realistic but fake image or video created using AI technology
Manipulation	Changing something in a dishonest way to deceive people
Prototype	An early version of a product built to test an idea
Encryption	Converting data into a secret code to prevent unauthorised access
Viral	Spreading very quickly and widely across the internet
Patent	Legal protection giving an inventor exclusive rights to their creation
Ethics	Moral principles that guide decisions about right and wrong
Transparency	Being open and honest, not hiding information
Authenticity	The quality of being real, genuine, and not fake
Misinformation	False information spread without the intention to deceive
Disinformation	False information deliberately created and spread to deceive
Open-source	Software whose code is freely available for anyone to use and modify
Cybersecurity	The practice of protecting computer systems from digital attacks
Whistleblower	A person who reveals hidden wrongdoing within an organisation
Intellectual Property	Creations of the mind protected by law, such as inventions
Bias	An unfair preference for or against something, often unconscious
Accountability	The obligation to accept responsibility for one's actions
Digital Literacy	The ability to use and critically evaluate digital technology

Comprehension Quiz

1. What did Zoe's app do?

- A) It created deepfake videos for entertainment
- B) It detected whether images and videos had been digitally manipulated
- C) It blocked all social media content
- D) It tracked people's locations online

2. How did Zoe first become interested in deepfakes?

- A) She saw a manipulated video of her teacher used to spread lies
- B) She read about them in a textbook
- C) Her parents worked in cybersecurity
- D) A friend asked her to create one

3. What was NexaTech's real intention?

- A) To improve the app and release it for free
- B) To buy the technology and prevent it from being released publicly
- C) To hire Zoe as their chief engineer
- D) To donate the technology to schools

4. Why did Marcus Chen want to suppress Zoe's app?

- A) Because the app did not work properly
- B) Because NexaTech's advertising clients profited from manipulated content
- C) Because he was afraid of artificial intelligence
- D) Because Zoe had stolen his idea

5. What did Zoe decide to do with her code?

- A) Sell it to the highest bidder
- B) Delete it permanently
- C) Release it as open-source software for everyone to use
- D) Keep it private and use it only herself

6. How did the public react to Zoe's presentation at the conference?

- A) They were confused and uninterested
- B) They gave her a standing ovation and her talk went viral
- C) They demanded she stop working on the project
- D) They ignored her because she was too young

7. What does 'open-source' mean in the context of the story?

- A) Software that is expensive and exclusive
- B) Software whose code is freely available for anyone to use and improve
- C) Software that only works on certain devices
- D) Software controlled by a single company

8. Why is digital literacy important according to the story?

- A) It helps people earn more money
- B) It helps people critically evaluate online content and detect manipulation
- C) It makes people better at playing video games
- D) It is only useful for computer programmers

9. What ethical principle does Zoe's story illustrate?

- A) That technology should always prioritise profit
- B) That powerful tools should be transparent and accessible, not controlled by corporations
- C) That young people should not get involved in technology
- D) That all AI is dangerous and should be banned

10. What happened to NexaTech after the story became public?

- A) Nothing changed at all
- B) They faced public pressure and had to adopt transparency policies
- C) They went bankrupt immediately
- D) They bought Zoe's company

Answer Key

#	Ans	Question
1	B	What did Zoe's app do?
2	A	How did Zoe first become interested in deepfakes?
3	B	What was NexaTech's real intention?
4	B	Why did Marcus Chen want to suppress Zoe's app?
5	C	What did Zoe decide to do with her code?
6	B	How did the public react to Zoe's presentation at the conference?
7	B	What does 'open-source' mean in the context of the story?
8	B	Why is digital literacy important according to the story?
9	B	What ethical principle does Zoe's story illustrate?
10	B	What happened to NexaTech after the story became public?

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