## Personal & Research Statement

#### 01.Personal Information

Name: Sahan Malinga

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### 02.Education

#### Ordinary Level (O/L) — Completed

Results: 7 A's and 2 B's

o A Grades: [ Mathematics, Science, English, Commerce, Technology, History, Buddhism]

o **B Grades:** [Sinhala, Sinhala Lit]

**Estimated GPA:** 3.8 / 4.0

Estimated GPA FOR core subjects: 4.0 / 4.0

### 03. Impact of Crises on Academic Performance

After O/L, I faced many problems. COVID 19 closed schools, and Sri Lanka's economic crisis caused unrest. At the same time, my family faced a personal crisis when my father developed a serious health condition following the COVID 19 vaccination. He ceased producing hydrocortisone naturally, leading to frequent fainting, mobility issues, and the need for daily medication and regular hospital visits. He's the only one earning money, so we had big financial issues. As a result, I was able to cover less than 10% of the A/L syllabus. and the ongoing instability forced me to end my schooling earlier than planned. Despite these extraordinary circumstances, I sat for the A/L examinations with limited preparation and lack of study materials. I earned only a simple pass (S) in Physics, while failing Mathematics and Chemistry. I present this account not as an excuse, but as an honest reflection of the external factors that influenced my academic outcome.

### 04. Self-Directed Learning and Technical Projects

Despite the setbacks in my A/L results, I refused to give up on my education. With limited resources, I purchased a used laptop. I turned to free online platforms like YouTube, W3Schools, and ChatGPT to learn programming. I started learning programming because I wanted to earn money by freelancing, but I never succeeded due to my lack of resources. This led to creating practical projects like websites and Telegram bots, including my most ambitious early project: a ChatGPT Telegram bot and subsequent Android web app. My laptop couldn't run Android Studio, so I used GitHub Codespaces to set up a remote Linux environment and compiled the app through a web-based IDE. I also used Google Collab to render 3D projects in Blender and completed many other projects. However, I soon realized that self-learning alone wasn't enough, and I became determined to pursue a university education to become a professional full-stack developer in the future.

# 05.Decision to Avoid Sri Lankan Universities

I initially planned to rewrite the A/L examinations to qualify for a Sri Lankan university. However, after researching local programs and speaking with cousins currently enrolled, I became deeply demotivated.

- Unreliable internet and outdated lab equipment
- Lack of training in full-stack development, cloud, or APIs
- No real industry preparation or global competitiveness
- Final year projects are often basics (I had already achieved through self-learning)
- Frequent university closures due to strikes and political issues

### 06. Why I Chose to Pursue Higher Education in the USA

After completing Harvard's CS50 course online, I was deeply inspired by its rigorous structure, challenging problem sets, and introduction to professional software engineering practices. It showed me what a world class computer science education could be. I knew I wanted that same level of excellence in a full degree program one that would push me far beyond what I could achieve through self-learning alone. U.S. universities provide access to powerful labs, reliable high-speed internet, cloud development environments, and modern tools that are essential for building complex, real-world applications.

#### 07. Preparing for Admission to Top U.S. Colleges

After deciding to pursue a U.S. education, I began researching the requirements of top colleges. I visited their official websites and learned that most require the SAT (or ACT), IELTS or TOEFL for English proficiency, teacher recommendations, a high school transcript, and additional materials like essays and activity lists.

### 08. Barriers to Completing U.S. College Application Requirements

While preparing for U.S. college applications, I realized that taking the SAT and IELTS though achievable for me academically was financially impossible. The combined cost exceeds \$300, nearly two months of my family's total income (\$150/month).

More critically, I lack an official high school transcript and teacher recommendation letters. I ended formal schooling early due to crises and never completed the final years, so no transcript exists. Although I was consistently **top 1 in Mathematics** and earned strong test scores across subjects, our school does not maintain digital records or use official email systems. Teachers would likely write positive recommendations. I was a high-achieving, independent student but contacting them now is not feasible. The school has no structured way to issue or mail documents, and I no longer have direct access. These systemic and personal barriers make it impossible to meet standard application requirements, despite my readiness and qualifications.

### 09. Why I Decided to Apply Without Standard Documents

After thinking deeply, I realized something important: the "requirements" of top U.S. colleges are not as strict as they seem. Almost **half** of admitted students have perfect transcripts and high SAT scores. Nearly **all** have strong recommendation letters. These things are not rare. They're common. Getting them is not hard for most students. So how can top colleges, which accept only a few students each year, really use these to choose? they cannot rely on these common documents to make final decisions.

### 10. My Application Strategy: Revealing My True Self

I began thinking like a U.S. admissions officer. I realized they don't select students based on what others say transcripts, scores, or recommendation letters. but on **who the applicant believes they are**. They care about my voice, my goals, my ambitions, and my self-awareness, Essays and projects are the only places where I get to define who I am.

That's why I'm writing this document and building real projects—not to impress with grades, but to show **who I really am**: a self-taught developer who turned crisis into code, who built AI-powered apps with no resources, and who refuses to let circumstances define the future.

## 11. The Project That Shows Who I Really Am

I started thinking about a project that would truly show who I am, not some basic assignment everyone does, but something useful for everyone. I wanted to build something different. I believe real ideas come from real problems. So instead of inventing a "new" idea, I looked for a real problem I was already facing.

I thought back to my own frustrations while applying to U.S. universities: browsing official websites to dig up details on admissions, scholarships, or requirements felt endless. I'd turn to AI chat apps for quick answers, but they often pulled from random websites, giving half-true or totally wrong info, like outdated emails that bounced back. Finally, I'd resort to emailing admissions offices directly, but that was a nightmare too. I sent over 500 emails to different universities, chasing specifics on financial aid for internationals or transcript alternatives, I waited days, only to get basic answers.

That's when I saw the problem clearly: **students like me have no simple, trusted way to get accurate answers about U.S. colleges.** 

From that pain came my project: **Massachusetts Institute of Technology Q&A**, a web app that gives **instant, accurate, official answers** to any question about MIT straight from official sites, nothing else.

This is **my transcript**. This is **my recommendation**. This is **proof** I belong at a place like MIT, not because of grades, but because I **think**, **build**, and **solve** like someone who does.

I have included the complete source code, design, and technical details of **Massachusetts Institute** of **Technology Q&A**.

## 12. Massachusetts Institute of Technology Q&A web app

My Massachusetts Institute of Technology Q&A web app, a single, self-contained HTML file that lets anyone ask questions about Massachusetts Institute of Technology and get accurate, officially sourced answers using Google's Gemini API. The app is developed as a single HTML file to ensure easy uploading to portals without issues.

#### How I Built It (Step by Step)

1. **Problem & Idea** I realized: All chat apps lie, websites hide info, emails take forever. Students need **one place** with **only official MIT answers**, fast.

#### 2. Tech Stack (All Free)

Frontend: HTML, Tailwind CSS

Backend: Google Gemini API

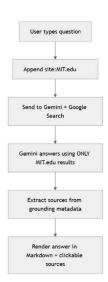
- lightweight Built with no heavy assets
- Coded in GitHub Codespaces.
- 3. Support: Supported by Al and API docs

I would love to continue refining this project with **Massachusetts Institute of Technology's** guidance or support. I built this because I really want to come to **Massachusetts Institute of Technology.** 

## 13. My Vision for the Future of Software Development

I believe the future of software development lies in cloud computing and AI. Right now, people waste money buying new laptops every few years because hardware gets outdated fast, and we have to carry devices everywhere. it's inconvenient and expensive. But cloud computing changes everything: imagine accessing your full personal system, your apps, your files, your powerful setup from any device, anywhere in the world. That's efficient, scalable, and sustainable.

In the future AI might generate software instantly without needing deep coding knowledge. Most people see AI as the enemy, but I see it differently. AI doesn't think creatively; it follows patterns, acts like an average human, and builds like one. It can't invent truly new ideas. Jobs will shift, and routine coding may disappear, but the winners will be those who think differently the ones with unique vision, bold problems to solve, and fresh perspectives. These people won't be replaced; they'll use AI as a powerful tool. I want to be one of them—not just a coder, but a thinker who directs AI to create what no one else has imagined.



### 14. My Future Plan: AI Developer, Innovator, and Problem-Solving Entrepreneur

I want to become an **AI developer**, not just someone who uses AI, but someone who **improves AI models**, makes them faster, smarter, and more accessible. I'm passionate about building AI-powered software that solves real human problems: tools that run in the cloud, work on low-end devices.

My dream is to work at companies like **xAI**, **Google**, **or Tesla**—places that don't just build products, but **shape the future** 

But my ambition goes further. I don't want to work for someone forever. I want to **start my own company**. I don't chase "new" business ideas. I hunt problems, because every great business is a solution in disguise.

My plan is simple: **find a real problem, deeply understand it, find a solution, and scale it into a business**.

#### 15. Why I Need a U.S. College Education

I don't just want a U.S. college. I **need** it to reach my goals. Self-learning got me far, but U.S. college gives me mentors, research labs and a network that turns ideas into reality. Without this environment, I stay in survival mode.

## 16. Why I Chose MIT as My Future University

The moment I first visited the MIT website, it was like a spark igniting a fire I didn't even know was waiting inside me—it inspired me profoundly, pulling me into a world alive with possibility and shifting my entire perspective on higher education. As I explored its pages, I realized MIT isn't just a college; it's a birthplace for groundbreaking ideas, where innovation thrives in every corner. Reading official documents on research, labs, and student projects, while watching videos of hackers building robots or tackling AI challenges, created an instant connection—I knew I belonged there too. Originally laser-focused on AI and software development (the skills I'd self-taught to escape our crises), that visit broadened my horizons, sparking deep curiosity in robotics, engineering technologies, biosciences, and beyond. Truly, the MIT website didn't just inform; it transformed my vision, making me fall head over heels in love with the institution's unyielding spirit of exploration and its commitment to turning "what if" into "watch this."

I thrive on thinking creatively and generating new ideas, and I saw MIT as the perfect home for someone like me—a place not defined by resources alone, but by a community of students who constantly push boundaries with fresh, bold concepts. That's why I chose MIT as my future and committed to applying.

### 17. Why MIT Colleges Should Select Me

MIT should select me because I'm not just another applicant with only perfect scores, I'm a proven builder who turns chaos into solutions. I didn't wait for permission: I built a web app that delivers 100% accurate MIT answers from official sources only. I sent 500+ emails to admissions offices. I don't have the standard documents. No transcript, no SAT, no recommendation letters, but I refused to let that stop me. Instead of giving up, I replaced them with proof.

- Transcript? → This entire document + project
- SAT score? → My problem-solving skills
- Recommendation letters? → the product speaks for me

I turned the application process into a **project itself**:

- Built a tool to fix the exact problem I faced
- Deployed it live, documented every line
- Included full source code at the end of this file

You can **run it, test it**. That's better than any paper ever could be.

This is my transcript. This is my recommendation. This is **me**.