

## **The Journey of Human Life: A Personal Perspective**

Hi, I am Aviral. I am a 28 years old techie, I like problem solving, playing cricket and some carrom.

### **Introduction**

Every human life is unique, shaped by experiences, choices, and aspirations. My journey began in Prayagraj, Uttar Pradesh, where I was born and raised. With a strong educational foundation from Bishop Johnson School and College, I later pursued a Bachelor of Technology in Electrical Engineering from JSS College in Noida. Over the years, my professional path evolved from business analysis to data analytics, and ultimately, into the dynamic world of Generative AI. Throughout this journey, I have embraced the philosophy of "progress over perfection," constantly striving for growth and improvement.

### **Early Influences and Inspirations**

Growing up in Prayagraj, I was deeply influenced by my elder siblings, who worked in multinational corporations. Their careers inspired me to explore STEM fields, and eventually, computer science. My early inspirations were my parents, whose unwavering support instilled in me the values of hard work and perseverance. As I matured, global tech leaders like Bill Gates and Steve Jobs became guiding figures, shaping my curiosity about technology and innovation.

### **Professional Journey**

My career trajectory has been a testament to adaptability and learning. After completing my undergraduate degree in 2020, I began my professional journey as a Business Analyst at a startup. This role introduced me to the world of reporting and dashboarding, where I worked with tools like Power BI and Zoho. Although brief, this experience laid the foundation for my analytical skills.

In 2021, I joined Accenture as a Data Analyst. Over the next two years, I worked extensively with SQL, Python, and ETL pipelines, developing a strong understanding of data processing and management. My responsibilities involved optimizing queries, automating workflows, and ensuring data integrity. Eventually, my curiosity led me toward Generative AI, a field that combined creativity with problem-solving. Transitioning into this domain was one of the most defining challenges of my career, but through self-study, side projects, and mentorship, I gradually gained confidence and expertise.

### **Overcoming Challenges in the AI Domain**

One of the most significant hurdles I faced was transitioning into the Generative AI team from an ETL testing background. Initially, the complexity of new AI concepts felt overwhelming. To bridge the gap, I adopted a structured approach:

1. **Online Learning** – I took specialized courses on AI, NLP, and deep learning.

2. **Practical Application** – I built side projects to reinforce theoretical knowledge.
3. **Collaborative Learning** – I actively sought guidance from experienced colleagues.

This methodical approach not only helped me gain technical proficiency but also instilled confidence in my ability to navigate new domains.

## **Technical Projects and Innovations**

### **Web Crawler for Data Extraction**

While working on a web scraping project, I encountered a challenge where the required data was not present in raw HTML but was dynamically loaded via JSON APIs. After thorough research and experimentation, I leveraged browser network inspection tools to identify the exact API calls. Using Python's requests and BeautifulSoup, I built a script that extracted the necessary data efficiently. This project deepened my understanding of modern web architecture and dynamic content loading.

### **SQL Query Optimization for Large Datasets**

In one of my SQL Server projects, I faced performance issues due to inefficient queries. The execution plan revealed full table scans, which were slowing down the report generation. By creating indexes, optimizing joins, and avoiding unnecessary column selections, I improved query performance drastically. This experience reinforced the importance of database optimization in large-scale applications.

### **Automating Data Validation in ETL Testing**

To streamline data validation, I developed a Python automation script using pandas and pyodbc. The script extracted data from source and target databases, applied validation rules, and generated a mismatch report in Excel via openpyxl. This automation significantly reduced manual effort and improved accuracy.

### **Fine-Tuning Generative AI Models**

While working on a Data Health Monitoring App, I noticed that the AI-generated alerts lacked specificity. To enhance accuracy, I implemented few-shot prompting techniques, providing the model with multiple examples to guide its output. Additionally, I fine-tuned temperature and top-k sampling parameters, achieving a balance between creativity and reliability.

### **Vector Databases for Job Matching**

In a job matching project, I utilized FAISS and Chroma to build a system that connected job openings with relevant candidates based on skillsets. The challenge lay in selecting the right embedding model—some models captured keywords but missed contextual relevance. Through iterative testing and fine-tuning, I optimized embeddings to improve match accuracy.

## **Work Philosophy and Approach**

I thrive under pressure and believe in maintaining a work-life balance. However, during high-priority tasks and deadlines, I focus entirely on getting the job done. I approach success and failure with a balanced mindset, treating both as learning experiences. My guiding philosophy of "progress over perfection" ensures that I keep evolving rather than waiting for ideal conditions.

### **Academic and Personal Aspirations**

In the academic sphere, I aim to deepen my expertise in:

1. **Robotics** – Exploring AI-driven automation and robotics applications.
2. **Frontend Development** – Enhancing UI/UX knowledge to complement my AI projects.
3. **Data Structures and Algorithms** – Strengthening problem-solving skills for complex challenges.

On a personal level, I aspire to learn:

1. **Kayaking** – To embrace adventure and outdoor exploration.
2. **Surfing** – To experience the thrill of mastering the waves.
3. **Swimming** – As a fundamental life skill and fitness activity.

### **Personal Definition of Success**

Success, to me, is not confined to monetary achievements or job titles. It encompasses continuous learning, making an impact, and maintaining a balance between work and personal life. If I can contribute meaningfully to my field, uplift others, and still have time for loved ones, I consider it a success.

### **Passion for Travel**

Beyond professional aspirations, I have an innate love for travel. If financial constraints were nonexistent, I would backpack across the world, exploring diverse cultures, landscapes, and experiences. Traveling broadens perspectives and enriches life in ways that no other experience can.

### **Legacy and Reflections**

At the core, I want to be remembered as a good human and a loving child. Titles and achievements fade, but the impact we leave on others endures. If I could give advice to my younger self, it would be: "Learn more. Play more." Embracing curiosity and joy in equal measure leads to a fulfilling life.

### **Conclusion**

Human life is a journey of growth, challenges, and self-discovery. My story is just one of many, reflecting the importance of perseverance, adaptability, and continuous learning. Whether in professional settings, academic pursuits, or personal adventures, the key is to

keep evolving. As long as we strive for progress, the journey itself becomes a fulfilling destination.