What research have you undertaken to help you understand Citi and the program you are applying for?

* Points on the program and how you may fit in
* Citi and technology, whats the impact, say sumn ab looking at the role tech had at citi

The program description offers a glimpse into what technology and software development is like at Citi, everything is built in house from front end to back end applications. There is a clear program path laid out, from learning the fundamentals of the Analyst role to unlocking the best fit for my skills. I admire the opportunity to gain an understanding of a variety of technologies.

I’ve spent time firstly and most importantly reading on role of technology at Citi, there is a clear approach to innovation and putting clients first. With the creation of innovation labs in 2009, Citi has looked at how technology advancements can play a powerful role in areas such as operations and delivering clients’ expectations. These have led to impactful solutions such as Citi being the first bank to launch 24/7, 365 dollars clearing which has not only enhanced client experience also demonstrates the positive direction that technology at Citi is heading in. Moreover, reading the global insights section of Citi’s website allowed me to understand specific cases of technology’s implementation. Artificial intelligence and machine learning are of strong interest to me, in one of these articles, the Head of the NY innovation lab at Citi discusses its merits and drawbacks. ChatGPT is one the most common large language models (LLM) which is trained to answer questions, what struck me here is the clear investigation on how similar tools may be incorporated across Citi’s businesses. There is a clear example highlighted with a model being able to handle client enquires and send SWIFT MT599 messages to them. While this is a specific case, I am confident that it demonstrates the time and commitment spent on harnessing technology at Citi for the future.

What do you do to keep your knowledge of business and finance current? What recent story in the business press has interested you most and why?

I am dedicated to constantly learning and engaging in order to maintain an up to date understanding of current business and finance. Consistently seeking reports through websites such as the ‘Financial Times’, ‘The Wall Street Journal’ and subscriptions have enabled me to gain real time updates and stay abreast of the latest trends and developments. I have have recently discovered various articles highlighting the growing trend of AI powered ‘smartcarts’ for grocery shopping and its massive potential. Grocery shopping is something that almost everyone does, however the pain in waiting in line for a cashier leads to many people ordering these groceries online.

According to Forbes, the proportion of shoppers who prefer the traditional way of going to a supermarket dropped from roughly 50% in 2019 to 38% in August of 2023. Coresight Research also highlighted the grocery store market share drop from 69.7% in 2017 to 66.6% in 2022, as the estimated market size is $1.5 trillion, even a small percent decrease has enormous effects. Various technologies have been proposed and are currently in use to tackle this such as Amazon’s Fresh stores that allow a ‘pick and go’ system, however this requires fitting of the whole store with cameras and sensors that may not be economically viable or reasonable for smaller stores. This is where smart carts may play a role, they incorporate all this technology into the cart, also allowing the customer visualise the cart’s contents through a display. Some versions can accurately recognise the weight of the content down to 0.01 kg, and some businesses (Veeze) claim that it can reduce the average shopping time to 24 minutes while increasing the basket size by 73%. I personally feel like this is an extremely innovative concept, comparing the supermarket sector to other areas of retail there is a lot of room for improvement. In addition, this specific case again exemplifies the huge potential of Artificial Intelligence and its versatility. Here it can save time and effort for both the retailer and customer, through boosting profitability and making the shopping experience more convenient and personalised.

Considering your own personal strengths, what experiences have you had that equip you for this program?

Studying Mechanical Engineering has exposed to me to various opportunities to explore and learn about technology and software engineering, where the learning was not directly related, I am convinced the skills are extremely transferable. The course has enabled me to cultivate my critical thinking skills, I have demonstrated this through the of use of MATLAB for projects on simulation and modelling. Recently, MATLAB was used for my third-year research paper in the field of Crystal Plasticity to analyse data and create models. Additionally, I have experienced collaboration within software development, currently, for a group project our team is aiming to control a robot arm using Arduino which involves C/C++.

Furthermore, I recently completed a 10-week summer internship as a Technology Analyst at a similar financial services firm, during which I gained expertise in languages such as Python and expanded my knowledge on software development. The opportunity to immerse myself in aspects ranging from crucial areas of the development process such as Agile, to learning essential Git and version control skills enhanced my ability to collaborate effectively within a team. Moreover, I worked on a full stack project, which was although challenging, also extremely rewarding as I enriched my knowledge in various areas such as database management and front/backend development. I am confident that the familiarity I've gained from my time in the technology division at another financial services company will prove to be a great asset here.