MSc Computer Science – Personal Statement
Philippe Henderson

Dear Sir or Madam,

I would first like to thank you and the University College London for this opportunity. When reading through your program and speaking with students, it is clear that UCL is a visionary institution that seeks to empower students to learn, grow and ultimately use their skills and knowledge to help tackle the world's greatest problems.

It is therefore natural that the ideal candidate to drive this vision forward would combine fundamental traits – such as passion and curiosity, and love of learning and challenges – with hard and soft skills learnt through a range of professional and personal experiences into a drive to lead change at a world scale. I deeply admire your ambition, and I am certain that my profile is an ideal fit to carry this purpose forward.

If I identify with UCL's vision, then the MSc in Computer Science is the perfect medium through which I can achieve these ambitions, for three main reasons. First, it satisfies a core desire of mine to be able to build my ideas. Second, I find it immensely fun. Third, I see this as a critical step in building a complete skillset necessary to one day lead change at a world scale. Please allow me to explain.

I remember a time when I was sitting next to a colleague in Data Science. I was a beginner in SQL and was absolutely confounded by the language. As I sat next to this otherworldly genius, I was struck – as I have been many times – by a deep desire to do what he could do. His hands were flying, his fingers dancing across the keys of his computer at the pace of a pianist, building a cathedral in his mind and dumbfounding me in the process.

That was six months ago. Earlier that summer, I had decided to forgo the opportunity to study a master's in quantitative economics and finance (oh God) to instead explore an idea that had sprouted in my mind – one that I have had since I was a child.

I am an intensely curious and visionary person who has always been driven by the prospect of what could be, and what can be built to get there. As a child, I was obsessed with designing the perfect aquarium, a remote-controlled plane with cameras, and the list goes on. While I love the path that I have taken until now, it has left me with a certain void: I am like an architect with neither pen nor paper to draw out my ideas. Be it in discussions during Blockchain conferences, or when looking at how engineers build components of the N26 app, I have often felt a deep frustration when watching others understand and build what I could only dream of.

Enter coding.

I picked up R at University while building the dataset on which I wrote my thesis, and I was quickly hooked. To the point that a year later I consciously chose to take a two-week break while travelling through South America to try and code some more. I needed to expand the dataset I had for my thesis to submit it for a conference, and rather than manually copy and paste hundreds of CSV files, I figured: why not try to web-scrape this? My first real program was born: a thousand-line monolith of inefficiency. But much to my delight, it worked! Two months later, another travel break: this time building a recurring web-scraping tool. Still inefficient, still buggy, but just as exciting.

I could not help it: I was addicted to the problem solving. I have since dabbled in more coding, learning some Python, JavaScript and SQL. I have used basic JavaScript in Google Scripts to automate a portion of my work at N26, which is when I realized the beauty of programming applied to micro-problems, not just to large scale solutions. Coding is leverage: By automating work, I was quite literally reducing time. The more I tried, the more my passion took hold, and the more the idea grew in my mind:

If I already find joy when knowing only the basics, what will happen if I dive headfirst into the rabbit hole? *Why not* study Computer Science?

My experiences until now have already helped me build an extraordinarily strong toolkit of knowledge and skills – one that I know will be valuable for any company I work for in the future, and for any master's I choose to join.

At university, I chose to hone my quantitative skills by studying mathematics and statistics in depth. I decided to further develop my knowledge in that world by writing my thesis in Econometrics, where I built a custom dataset using public data from the National Basketball Association (NBA) to study the dynamics of high-performing teams. Not only did this open the pandora's box of coding that has brought me to this point, but it also reinforced my analytical thought patterns, and taught me critical knowledge and theory on team dynamics and culture – which would prove invaluable at N26.

Through work and volunteering, I have learnt to tackle complex problems while under pressure. I re-launched our student representation body, organized several conferences and a weeklong recruitment event while studying. At Cisco, Thomson Reuters, and Quorus I engaged in work centering around innovation and strategy. I have analyzed hundreds of companies in depth for business model patterns, and coached startups in the blockchain space. At N26, I developed a full portfolio of skills that has enabled me to go from intern to analyst to associate in fifteen months. I led and facilitated organizational change as the Chief of Staff for my department, while resolving and closing complex incidents requiring in-depth data analysis. In my current role I am managing a global supply chain and delivery network of cards with a yearly operating budget of over 3 million EUR, while building up tools that automate work and using my analytical knowledge to generate critical business insights.

I have therefore built operational, quantitative, communication and leadership skills that will prove invaluable for my ambitions of becoming an entrepreneur. I am structured, highly organized, and very comfortable working under pressure and high expectations. But this – in my mind – is not enough. I believe that any medium through which I can channel my creative energy will be the ultimate keystone that brings all my skills together, and I am certain that the MSc Computer Science is the path to reaching this goal, for several reasons.

First, courses such as Introductory Programming and Algorithmics will provide the ideal foundation to reach my goal of being able to build my own ideas. Second, the program will provide me with a broad base of knowledge to understand the challenges and roles of domain specialists in multiple fields. I am particularly excited by the App Engineering, Computer Architecture and OS, and Software Engineering courses, which I believe would be of great value when working in a product management, or any cross-domain role in the future, and when starting my own company.

Third, this program fulfills my desire to upskill and unlock more opportunities with an eye towards our future. I have been following, learning and teaching about blockchain technology since 2017, and would be thrilled to study at an institution that places this technology at the heart of its research with the Center for Blockchain Technology. Courses in Entrepreneurship, Artificial Intelligence and Machine Learning will help fill out my diverse knowledge set and desire to learn more about our future. Finally, I very much appreciate the expectations set towards incoming students that academic work should be complemented with additional research and personal projects, and I look forward to participating in the many student associations, hackathons and other events to put my newfound skills and knowledge to the test.

To conclude, I believe that we are nearing a technological and societal crossroad – one that is being greatly accelerated with the current events in our world. These past few months, if not years, have confirmed my sneaking suspicion: we are at the tail end of the current innovation cycle. Faster food delivery, zippy electric scooters and pizza making robots are but a few of highly overvalued but only incrementally innovative startups that fight in already exhausted and dominated spaces.

If I so doggedly turn my gaze towards the future, it is because one, I am convinced that this decade will be one of immense change and two, most other people are still focused on this current paradigm and deeply underestimate the one that is on the horizon: decentralization, smart contracts, zero-knowledge proofs, 5G networks, fog computing, machine learning, 3D printing and countless yet to be discovered ideas that will change our world forever.

As the saying goes, luck occurs when preparation meets opportunity. I see the MSc in Computer Science at UCL as one of the major steps in this preparation so that one day, when opportunity comes to knock, I will be waiting with open arms.

It is with these words that I leave you to consider my application, with the hope – dear reader – that we will meet next semester.

All the best,

Philippe Henderson