



## The Joy of Data: Perspectives from Students and Faculty

For many, “data” may evoke the thoughts of spreadsheets and complex statistical formulas. “Data analysis” can sound even more intimidating—a term that may feel inaccessible to many. However, this impression may veil the appealing world of data waiting to be explored.



### What is the Fun?

Data science involves the processes of data collection, cleaning, and analysis; data scientists look for patterns and trends to turn raw data into useful information. For instance, water dripping from air-conditioners is a common problem in Hong Kong, but inspecting the exterior units in densely populated areas can be tricky. By training computer models with data from different sources, there is a chance to create an AI model that learns the patterns and predicts the likelihood of water dripping, helping identify at-risk air-conditioners. This is what Mr Sky Ng, a Year 3 student in Computer Science at CityUHK, has been tasked with during his internship. “I got a lot of satisfaction from solving or alleviating problems,” Sky shared with a smile.





This sense of satisfaction and the accompanying smile are often shared among data science students. Ms Mavis Long, a Year 3 Computer Science student, found great joy in applying data structures and algorithms to tackle challenges. “Take the shortest path problem, for example: measuring the distance of all paths on a map manually is difficult and time-consuming, but algorithms allow us to solve this efficiently!” If that sounds too abstract to understand, no worries—Mavis provided a practical example: “Think about the recommended path in Google Maps!” Indeed, data science is woven into the fabric of our everyday lives.



An equally dazzling smile was observed on Mr Edmond Siu, a Year 4 Data System Engineering student at CityUHK. Edmond, who has represented Hong Kong multiple times in the International Underwater Robot Competition, cherishes the collaborative spirit of his team. “Building a robot is never a one-person job; it requires teamwork. Electronic engineering provides the heart, mechanical engineering shapes the body, and data science acts as the brain of the robot. There is a real happiness in working with a team that shares the same passion.”

### Value from Data

“Data science is all about bringing out the value from data,” remarked Mr Gabriel Lai, a Year 4 student in Data System Engineering. Just like detectives hunting for clues to solve mysteries, data scientists piece together evidence, find connections, and transform data into insights. For example, the browsing data we generate daily might seem insignificant, but they can be goldmine for data scientists. The data can be analysed to make predictions and recommendations, such as the suggestions we see on social media.



### “Data is the New Oil”

When asked about the future of the field, Professor Lishuai Li, Programme Director of Data Empowerment: Learn, Transform, and Achieve (DELTA) at CityUHK, shared, “The trend of data science is set to accelerate.” She noted, “The excitement we see today is mostly in the cyber world, exemplified by ChatGPT. The next phase will bring this excitement into our everyday lives; there might be intelligent systems or AI agents who can execute various tasks in the physical world, bringing value to industry and society!”

*Excited to learn more about this evolving field? Scan the QR code to discover how you can shape your future!*

