

José Luis Laraya

May 27, 1944 - August 6, 2026

**Filipino Engineer, Computer Pioneer, and Brother of the
University of the Philippines Beta Sigma Fraternity**



José Luis Laraya

A Life of Innovation and Service

The University of the Philippines Beta Sigma Fraternity International mourns the passing of José Luis Laraya, a distinguished Filipino engineer whose pioneering work helped usher in the era of the personal computer.

Born on May 27, 1944, José Luis Laraya was a product of the University of the Philippines and a member of a generation of Filipino engineers who ventured abroad at a time when electronics and computing were undergoing a technological revolution. His career took him from the Philippines, to the University of Tokyo, and eventually to Kingston, Ontario, where he became one of the principal engineers behind one of the earliest personal computers.

From the University of the Philippines to Japan

Laraya began his engineering education at the University of the Philippines, studying mechanical engineering. He subsequently went to Japan and pursued electronics engineering at the University of Tokyo from 1962 to 1967.

It was a remarkable period in technology. The transistor had already transformed electronics, while engineers were rapidly moving toward integrated circuits and increasingly sophisticated semiconductor devices.

At the University of Tokyo, Laraya became involved in semiconductor research. In 1967, he co-authored technical research concerning the reduction of transistor storage time using a Schottky-barrier diode. This work placed him in the rapidly developing field of high-speed electronic switching. His education and research in Japan would later prove invaluable when the microprocessor appeared.

A New Life in Canada

After completing his studies in Japan, Laraya moved to Canada and settled in Kingston, Ontario. He worked as a computer hardware engineer at Queen's University, where he became acquainted with Mers Kutt, a computer scientist and entrepreneur who envisioned a radically different future for computing.

In the early 1970s, computers were generally large, expensive machines operated by universities, governments and major corporations. Kutt believed that the newly emerging microprocessor could change that. Instead of a computer occupying a room, why not build a computer that an individual could own and use? Laraya had precisely the technical background needed to attempt it.

The Intel 8008

In 1971, Intel introduced the 8008, one of the world's earliest commercially available 8-bit microprocessors. For Laraya, its significance was immediately apparent. The 8008 was tiny compared with the central processors of conventional computers, but it presented a tantalizing possibility: a complete computer could potentially be constructed around a single microprocessor.

Laraya joined Kutt's effort to turn that possibility into reality. The project eventually became Micro Computer Machines (MCM) in Ontario.

The Kingston Basement

One of the most remarkable chapters in Laraya's career took place not in a major corporate laboratory, but in his Kingston-area home.

In 1972, MCM obtained an Intel SIM8-01 development system based on the new 8008 microprocessor. Laraya used the equipment to build the first experimental MCM computer.

York University's Computer Museum records that in mid-1972, MCM's chief hardware engineer José Laraya built the first prototype of the MCM/70 using the Intel SIM8-01 system.

The equipment was primitive by today's standards: an Intel 8008 processor, prototype memory and interface circuitry, an EPROM programmer, and a Teletype-style terminal. But what Laraya was doing was revolutionary: turning a tiny semiconductor device into a functioning general-purpose computer.

From Prototype to the MCM/70

The first prototype was only the beginning. The SIM8-01 architecture proved inadequate for the full ambitions of the MCM team. Laraya therefore had to develop a more sophisticated hardware architecture.

His engineering work became the foundation of the machine that would eventually be called the MCM/70.

The project was a team effort. Mers Kutt provided the vision and business leadership, while engineers and programmers—including Gordon Ramer and others—worked on software and the implementation of APL. But Laraya was responsible for the crucial hardware engineering.

York University's historical record identifies him specifically as the chief hardware engineer responsible for the first MCM/70 prototype.

The MCM/70

The MCM/70 was extraordinary for its time. It was a microprocessor-based computer designed specifically for individual use, rather than a miniature version of a conventional mainframe.

York University's Computer Museum describes the MCM/70 as the first microprocessor-based computer designed specifically for personal use. The museum dates Laraya's first prototype to 1972, the public announcement of the MCM/70 to September 25, 1973, and the beginning of manufacturing to mid-1974.

The machine incorporated features that would become familiar in later personal computers: a microprocessor, keyboard input, display, memory, program storage, software, and individual-user operation.

The MCM/70 also ran APL, a powerful programming language used for mathematics, engineering, statistics and business applications. The machine was intended to be a useful computer for an individual user.

A Filipino at the Beginning of the PC Revolution

The importance of Laraya's contribution becomes clearer when viewed against the larger history of computing. The MCM/70 appeared before the Apple II, before the Commodore PET, and years before the IBM PC. It was part of the pioneering wave of microprocessor-based machines that demonstrated that computers could become personal rather than institutional.

This does not mean that Laraya single-handedly invented the personal computer. The development was a collaborative achievement involving Mers Kutt, Laraya, software engineers, programmers and many others.

But Laraya's role as the engineer who transformed the 8008 microprocessor into a working personal-computer system is a significant part of that history.

One of the places where the personal-computer revolution took shape was Kingston, Ontario—and one of the engineers at its center was a Filipino from the University of the Philippines.

Beyond the MCM/70

Laraya's contribution to computing did not end with the MCM/70. After his work at MCM, he continued developing computer technology in Canada. Historical records from York University document his subsequent involvement with other personal-computer projects, including the Persona computers manufactured in Ontario.

His later work extended into portable computing, communications and computer security.

In the late 1990s and early 2000s, Laraya was named as an inventor on patents involving cryptographic tokens and computer security systems, together with George Solomos.

Thus, the arc of Laraya's career extended from semiconductor research → microprocessors → personal computers → portable computing → computer security.

Remembering José Luis Laraya

The York University Computer Museum later preserved the history of MCM and its pioneering computers.

In 2001, Laraya participated in oral-history interviews about his work with MCM. Years later, he returned to York University and was able to see and examine the historic MCM/70 technology again.

The preservation of these machines and his recollections ensures that future generations can understand how early microcomputer technology helped open the door to the personal-computer age.

For us as members of the University of the Philippines Beta Sigma Fraternity, José Luis Laraya represents more than a chapter in computer history. He represents the accomplishments of a UP-trained Filipino engineer who carried his education and ingenuity into the international arena and contributed to a technological transformation that changed the world.

He demonstrated that Filipino engineers could participate at the very frontier of technology—not merely as users of innovation, but as its creators.

A Legacy Worth Remembering

José Luis Laraya's journey began in the Philippines, continued through the University of Tokyo, and led to Kingston, Ontario.

From his engineering education at UP and his semiconductor research in Japan came the knowledge that would help him recognize the extraordinary potential of the microprocessor.

In a Kingston laboratory—and, remarkably, in the early experimental work associated with his home—he helped turn that potential into one of the earliest personal computers.

The MCM/70 would become part of computing history. José Luis Laraya would continue innovating for decades afterward.

He passed away on August 6, 2026, at the age of 82.

His life stands as a testament to UP education, Filipino ingenuity, engineering excellence and the pioneering spirit of those who dared to imagine what computers could become.

For the members of the University of the Philippines Beta Sigma Fraternity International, his memory is a source of pride.

May his pioneering work and his life of innovation continue to inspire generations of UP Beta Sigmans.

Rest in peace, Brod José Luis Laraya. May your memory live on in the history of the University of the Philippines, in the history of computing, and in the brotherhood you helped represent.

Historical sources

- York University Computer Museum — MCM/70 collection and historical account.
- York University Computer Museum — MCM/70 prototype record.
- York University MCM archive — photographs and José Laraya oral-history interviews.
- Canadian and international patent records concerning Laraya's later computer-security inventions.