## Annals of Emerging Technologies in Computing (AETiC)

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## Editorial

Dear Reader,

Nearly a quarter of a century ago, much of the computing world and society more widely were waiting to see if some of the more dire predictions about the Millennium Bug would come to fruition. Thankfully (and due to a lot of hard work by many individuals and companies), the new millennium started without anything resembling Armageddon, and today many computer science students look blankly when hearing about the Bug and the sleepless nights it caused.

The Millennium Bug, also known as the Y2K bug, was a computer flaw that became a major concern in the late 1990s, tied to the transition from December 31, 1999, to January 1, 2000. The issue arose from the widespread practice of programming dates with only two digits representing the year, such as "99" for 1999. This coding shortcut meant that when 2000 arrived, many computer systems would interpret "00" as 1900 instead of 2000, potentially causing errors in calculations, data processing, and system operations.

Historically, the Millennium Bug highlighted the global dependency on digital infrastructure. From banking systems and power grids to aviation and healthcare, the concern was that critical sectors would fail or malfunction due to the Y2K issue. Governments, corporations, and organisations worldwide launched extensive, collaborative efforts to prevent potential disasters, investing billions of dollars in updating software, rewriting code, and testing systems. The sheer scale of the preventive measures underscored the increasing complexity and interconnectedness of global technology systems as the 21st century approached.

In the last few weeks, I have been thinking much about my father, who died in July. Unlike me, he was a skilled craftsman. One of his sayings was, "Measure twice. Cut once." In essence, what he was saying was that getting things right the first time saves a lot of hard work later. If four digits instead of two had been used to record the year, many hours of work would have been avoided, and a significant sum of money would have been saved!

As we move towards the second quarter of the century, let us not forget the lessons of the past. Let us ensure that the research we do and the systems we build are designed well, tested thoroughly, and are not the cause of sleepless nights and worry. Let us learn from the Millennium Bug and strive to get things right the first time. "Measure twice. Cut once."

With best wishes,

Professor Andrew Ware, On behalf of the Editorial Board, Annals of Emerging Technologies in Computing (AETiC).