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**Transportation Systems** 

Cristina Olaverri-Monreal

A Tribute to Women in the Field of Intelligent

# RESIDENT'S MESSAGE

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t is truly remarkable how women have persevered in male-dominated fields, such as the field of intelligent transportation systems (ITS). Despite the progress made in recent decades, women remain underrepresented in this field, which has negative consequences that hinder innovation, limit the diversity of perspectives, and perpetuate gender stereotypes.

Women represent more than half of the workforce and have demonstrated how their invaluable perspectives, experiences, innovative ideas, multidisciplinary approaches, problem-solving skills, and insights into research and development, are essential to the progress and evolution of many fields. The fact is, women bring unique and valuable perspectives to the table, and they must have access to equal opportunities to contribute to the research and development of ITS.

The successes of women in male-dominated fields are all too frequently disregarded, and holding leadership positions does not always ensure their equal career advancement and recognition. Women often encounter obstacles in forming professional networks and establishing relationships, making it difficult to break through the glass ceiling.

As the first woman to be elected as president of the IEEE Intelligent Transportation Systems Society (ITSS), I am deeply honored to serve as a role model for other women in this field. Women can succeed in this historically maledominated field and open doors for other women to pursue the same career path. In my role as president of ITSS, I hope to inspire and empower other women to envision themselves as scientists and innovators in intelligent transportation and vehicles research.

It is time for our ITSS to take action and promote gender diversity, equality, and inclusion. This requires a significant increase in the number of women in governing positions and as members. We must work together to address systemic barriers, such as unconscious bias and gender-based stereotypes, to ensure that all voices are heard and valued.

In this context, the ITSS Ad hoc Committee on Women and Underrepresented Groups (Wi-ITS) was recently launched to inspire and support women in this field. The committee aims to provide a platform for professional and leadership growth and promote the visibility of women and other underrepresented groups in ITS. The ultimate goal is to extend interest in the ITS field among female students to

Digital Object Identifier 10.1109/MITS.2023.3273826 Date of current version: 7 July 2023 later facilitate their recruitment in the industry or academia. This will help to equalize gender and other types of diversity in workplaces and create a more diverse talent pool.

I would like to pay tribute with these lines to all of the women who are contributing to the field of ITS, as their achievements inspire and empower other women to follow. I also recognize the ongoing need to encourage the next generation. By providing opportunities, resources, and mentorship, we can ensure that gender diversity becomes a driving force toward progress and innovation.

We, women, are essential to the advancement and innovation of the transport field, and with the brand new Wi-ITS committee, the ITSS is taking concrete steps to promote gender diversity and inclusion. By working together and supporting each other, we can overcome systemic barriers and create a brighter future in ITS.

Sincerely,

Cristina Olaverri-Monreal President IEEE ITSS

ITS

### **EDITOR'S COLUMN** (continued from page 3)

software, operating systems, and underlying hardware systems.

# Correct Value Systems Versus Whole Process Ethical Frameworks

In the last couple of years, research on the ethics of AI in the transportation sector has boomed, and relevant ethical norms and frameworks have been developed. If existing frameworkleveled ethical norms are compared to "constitutions," then in the next few years, a series of implementable regulations and enforceable rules for transportation industries, consisting of traffic data ethics, traffic algorithm ethics, and traffic systems ethics, should be on the agenda to enable "correct and reasonable" learning and working environments for big traffic AI models, and meanwhile, protect interests of human beings to the greatest extent.

# Mechanisms of Moderate Competition VERSUS Open Source Environments

By now, various open-source platforms-based AI events have been launched in various countries/regions. Big traffic AI models are no exception. By setting up unified interface standards and designing categories of challenging tasks—such as traffic planning, management, and

control for real or virtual cities-we gather all kinds of "AI talents" to meet on open source platforms. Under human-machine confrontation modes, machine-machine confrontation modes, and other modes, all AI talents could show talents, iterate in code exchanges, grow in complex environments, and evolve in challenging tasks. In the coming few years, basic competitions (compared to Olympiad mathematics, physics, biology, chemistry, information competitions of human) and specialized competitions-including traffic planning, traffic control, driverless vehicles, future transportation, etc. (challenges in industries)-might gradually take shape, providing platforms for scientific problems discovery and release, academic exchanges, as well as learning and training, competing, and gaming. Unsurprisingly, one day these events, spanning real and virtual spaces, might become another world event after the Olympic Games.

## **Best for the Last**

Starting with this issue, a new column, "History and Perspective," will be added to enrich the dimensions of *IEEE Intelligent Transportation Systems Magazine (ITSM)*. Aiming at "Browsing history of transportation, digging laws of technologies, promoting the development of society," the "History and Perspective" column will face the history of intelligent transportation systems (ITS), telling stories of transportation development from three storylines, such as timeline, character line, and technical line.

By absorbing both academic papers and narrative articles from multiperspective, multiangle, multidisciplinary, and multicultural perspectives, we truly believe that the "History and Perspective" column will bring fresh views, ideas, and thoughts to *ITSM* and ITSS.

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