

Future Research Further investigations should focus on the robustness of FML against adversarial attacks and its applicability in real-world scenarios.

Keywords federated machine learning, data privacy, centralized machine learning, predictive modeling, security

AUTHOR



Dr Samuel Sambasivam is the Chair and Professor of Computer Science Data Analytics at Woodbury University, Burbank, CA. He is also Chair Emeritus and Professor Emeritus of Computer Science at Azusa Pacific University. Additionally, he served as a Distinguished Visiting Professor of Computer Science at the United States Air Force Academy in Colorado Springs, Colorado, for two years.

Dr Sambasivam has over 15 years of experience in **doctoral education at Colorado Technical University (CTU)**, where he has held various roles, including **Chair of Doctoral Programs, Lead Computer Science Doctoral Faculty, and Dissertation Chair/Committee Member**. In these capacities, he has instructed both **core and concentration courses** in computer science.

His **research interests** encompass **Cybersecurity, Big Data Analytics, Optimization Methods, Expert Systems, Client/Server Applications, Database Systems, and Genetic Algorithms**. He has conducted extensive research, authored numerous publications, and delivered presentations in **Computer Science, Data Structures, and Mathematics**.

Dr Sambasivam holds a **PhD in Mathematics/Computer Science** from **Moscow State University**, a **Master of Science in Computer Science with Honors** from **Western Michigan University**, and a **Pre-PhD in Mathematics/Computer Science** from the **Indian Institute of Technology (IIT) Delhi**. Additionally, he earned a **Master of Science in Education (Mathematics) with Honors** from **Mysore University (NCERT-Delhi)** and a **Bachelor of Science in Mathematics, Physics, and Chemistry with Honors** from the **University of Madras (Chennai)**.

He is a **voting senior member of the ACM** and serves on the **Editorial Board of the Cybersecurity Pedagogy and Practice Journal (CPPJ)** ([CPPJ Editorial Board](#)). Dr Sambasivam is also a **Reviewer** for **Informing Science: The International Journal of an Emerging Transdiscipline** (Online ISSN: 1521-4672, Print ISSN: 1547-9684) and **InSITE 2025: Informing Science + IT Education Conferences**, Hiroshima, Japan.