

Dharma Prakash Agrawal

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Basic Information



Name: Dharma Prakash Agrawal
(Apr 1945–Feb 2021)

Birth	Unknown
Location:	
Title:	Unknown
Affiliation:	Unknown
Honor:	Unknown

1. Brief Introduction

Professor Dharma P. Agrawal, our beloved friend, mentor, and Editor-in-Chief of *Journal of Sensor and Actuator Networks*, passed away on 15 February 2021. Professor Agrawal was a renowned computer scientist who specialized in Wireless Networks and Communications and Computer Architecture. Since 1998, he had been the Ohio Board of Regents Distinguished Professor of Electrical Engineering and Computing Systems at the University of Cincinnati. He frequently published work on wireless sensor networks and ad hoc computing, and was one of the editors of the *Encyclopedia on Ad Hoc and Ubiquitous Computing* in 2009.

A distinguished professor who dedicated his hardworking life to his family and students, Professor Agrawal's passion was to educate students in the evolving field of Wireless Networking and Communications. He helped support international engineering students to further their undergraduate studies in the US and taught them to work hard no matter what the task was. Most importantly, he was a guiding factor in shaping many of his students' and junior faculty's professional and personal lives.

Professor Agrawal received his B.E. from National Institute of Technology, Raipur, India, 1966 (Electrical Engineering); M.E. Hons., Indian Institute of Technology Roorkee, India, 1968 (Electronics and Communications); and D.Sc., Federal Institute of Technology (EPFL) Lausanne, Switzerland, 1975 (Electrical Engineering). He was a faculty member at the ECE Dept., Carnegie Mellon University (on sabbatical leave), N.C. State University, Raleigh, and Wayne State University. His recent research interests included applications of sensor networks in monitoring Parkinson's disease patients, applications of sensor networks in monitoring fitness for athletes' personal wellness, applications of sensor networks in monitoring firefighters' physical condition in action, efficient secured communication in sensor networks, secured group communication in vehicular networks, use of Femto cells in LTE technology and interference issues, heterogeneous wireless networks, and resource allocation and security in mesh networks for 4G technology.

2. Principal Publications/Works

In more recent contributions, Professor Agrawal coauthored the introductory textbook *Wireless and Mobile Computing*, which has been widely accepted throughout the world. A third edition has been published. The book has been reprinted both in China and India and translated into the Korean and Chinese languages. He coauthored the book *Ad hoc and Sensor Networks*, 2nd edition, which was published in the spring of 2011. He authored a new textbook, *Embedded Sensor Systems*, published by Springer. A coedited book entitled *Encyclopedia on Ad Hoc and Ubiquitous Computing* was published by the World Scientific, and coauthored books entitled *Wireless Sensor Networks: Deployment Alternatives and Analytical Modeling*, and *Innovative Approaches to Spectrum Selection, Sensing, On-Demand Medium Access in Heterogeneous Multi-hop Networks and Sharing in Cognitive Radio Networks* were published by Lambert Academic.

Professor Agrawal served as an editor of the *IEEE Computer* magazine, the *Journal of Parallel and Distributed Systems*, and the *IEEE Transactions on Computers*. He was the Program Chair and General Chair for numerous international conferences and meetings. He received numerous certificates from the IEEE Computer Society. He was awarded a Third Millennium Medal by the IEEE for his outstanding contributions. He delivered keynote speeches at 43 different international conferences. He published over 691 papers and gave 67 different tutorials and extensive training courses at various conferences in the USA and at numerous institutions in Taiwan, Korea, Jordan, the UAE, Malaysia, and India in the areas of Ad hoc and Sensor Networks and Mesh Networks. He was named as an ISI Highly Cited Researcher, was a Fellow of the IEEE, the ACM, the AAAS and the World Innovation Foundation, and he was a recipient of the 2008 IEEE CS Harry Goode Award. In June 2011, he was selected as the best Mentor for Doctoral Students at the University of Cincinnati. He was named a Charter Fellow of the National Academy of Inventors.

In his institution lecture at ITT Roorkee on 19 December 2019, Professor Agrawal said the following that serves as a good summary of his way of life: "I myself have never understood why people choose to believe that mainstream jobs offer personal gain. I prefer freedom of work, that is, being able to work for as long as I want, whenever I want to, with my own deadlines and targets. More than that, I had always been drawn to the idea of research, so pursuing anything apart from that didn't seem logical. From very early on I enjoyed interacting with students and working with them. It's brought me such joy that although I could have retired 10 years ago, I continue to work. Another positive is that I have been able to attract a lot of PhD students in my time as a professor, having just supervised my 76th PhD dissertation. It is things like this that motivate me to continue working."

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