

**Dr.Vijay Bhatkar,** PhD, DSc (Honoris Causa)

Fellow IEEE, Fellow ACM

Fellow CSI, INAE, NASci, IETE, MASc, GES

Padma Bhushan (2015)

Padma Shri (2000), Maharashtra Bhushan

**Profile**

[www.vijaybhatkar.org](http://www.vijaybhatkar.org)

Thinker and thought leader, researcher and innovator, scientist and philosopher, educator and educationist, author and articulator, policy architect and institution builder, Dr. Vijay Bhatkar is one of the internationally acknowledged scientist and IT leaders of India. Dataquest magazine has acclaimed **Dr. Vijay Bhatkar** amongst 25 pioneers who shaped India's celebrated IT industry (US\$80 Billion in 2010) during the last 25 years.

Dr. Vijay Bhatkar is best known as the architect of **PARAM supercomputers** and bringing IT to the masses through a wide range of path-breaking initiatives, such as **GIST multilingual technology**, **MKCL's MS-CIT computer literacy program** and **Education To Home (ETH)** initiative. He is truly an institutional builder and is credited with the creation of several national institutions such as **C-DAC**, **ER&DC**, Techno Park, IIITMK, **I<sup>2</sup>IT**, **ETH Research Lab** and **Multiversity**. He led the development of several innovation-based products and systems and in this process nurtured many creative minds, enterprises and start-ups including ETH, MKCL, Divinet, Dishnet, Multiversity, Know-IT and others. For advancing the concept of integrative education through the synthesis of science and spirituality for service of society, Dr. Bhatkar has founded a new generation university called Multiversity.

He has authored and edited **11 books** and over **80 research and technical papers** in the field of **supercomputing, artificial intelligence, distributed computer control**, optimal control and education technology as well as in science and philosophy. His contributions to non-local systems based on his doctoral research have been acclaimed and his books on distributed computer control and artificial intelligence have been used as graduate level text books in the US and Indian universities. He has addressed the **Royal Society of London**, conventions of leading professional societies, convocations of over 12 Indian universities & institutes and delivered keynote addresses in many national and international conferences and seminars.

Dr. Vijay Bhatkar is one of the most acclaimed and decorated scientists of India in terms of national and international awards, fellowships of professional societies and public recognitions. He was conferred with **Saint Dnyaneshwar World Peace Prize in 2010** by World Peace Centre, Pune (Alandi) for promoting synthesis of science and spirituality for the service of humanity. For his contributions to IT in India, he was conferred with the **PADMASHRI Award** in 2000, one of the highest civilian recognitions by the Government of India and the **Maharashtra Bhushan Award** 1999-2000, the highest recognition by the Government of Maharashtra. He is also a recipient of several prestigious national awards, notably amongst them being, nomination for **Petersberg Prize** 2004. He was honored with C-DAC Advanced Computing Society Paper Oration Award in 2006, K.G. Foundation's Personality of the Decade Award 2004, Power Grid Corporation of India Ltd., (PGCIL) Award 2001 for Excellence in Information Technology, Om Prakash Bhasin Foundation Award 2000 in Electronics & Information Technology, Global e-Biz Award 2001, **Priyadarshni Award** 2000 for contribution in the field of Information Technology, Federation of Indian Chamber of Commerce and Industries (**FICCI**) **Award** for Excellence in Engineering & Technology 1999, **Lokmanya Tilak Award** 1999, Rotary Excellence Award 1997, Pune's Pride Award for Excellence in the World of Education for the year 1996, the **H.K. Firodia Award** for life-time achievements in science and technology 1995-96, **Distinguished Alumni**

**Award 1994** of Indian Institute of Technology (IIT), Delhi and of Visvesvaraya National Institute of Technology (VNIT) Nagpur, Vividhlaxi Audyogik Samshodhan Vikas Kendra (VASVIK) Award 1993, **Electronics Man of the Year Award 1992** by Electronics Component Industries Association (ELCINA), Ramlal Wadhwa Gold Medal Award 1992 by the Institution of Electronics and Telecommunication Engineers (IETE), National Research Development Corporation (NRDC) Award 1984-85, Federation of Indian Chamber of Commerce and Industry (FICCI) Award 1983 to ER&DC for excellence in Research & Development in Electronics, and Gold Medal Award 1976 by the Indian Geo-technical Society. He has also been conferred with several educational, social and spiritual awards.

He has served as a **Member of the Scientific Advisory Committee to the Cabinet of Government of India**. He was a **Member of the Governing Council of CSIR**, world's largest chain of scientific labs. He was also a **Member of several IT Task Forces constituted by the Prime Minister** in 1998 to propel India as IT superpower. He was invited to address The Royal Society in 2003. He led the Indian delegation to South Africa to formulate Indo-SA initiative in advanced computing. He was a member of the Indo-Russian Long Term Programme (ILTP) in Science & Technology. He has also been a member of Indo-Hungarian and Indo-French Joint Commissions. Presently he is the **Founder Chancellor of the India International Multiversity, Chairman of the ETH Research Lab** with 'Education To Home' (ETH) Mission of bringing education to millions of homes transcending the barriers of geographies, languages and economic level using advances in information technologies. Concurrently, he is the **Chief Mentor and Chairman of the Board of Management of the International Institute of Information Technology (I<sup>2</sup>IT)**, Pune. He is also the **Chancellor of the D.Y. Patil (Medical) University, Kolhapur**. He is serving as the **Chairman of the e-Governance Committee of Government of Maharashtra and Government of Goa**. He is the **National President of Vijnana Bharati**, the people's science movement of India and also Bal Vidnyan Chalwal, the children's science movement.

**Dr. Bhatkar is a Fellow of IEEE, Fellow of ACM, Fellow of the Computer Society of India (CSI), Fellow of the Indian National Academy of Engineering (INAE), New Delhi;** Fellow of the Institute of Electronics and Telecommunication Engineers (IETE); Fellow of the National Academy of Sciences India (NASI), Allahabad, Fellow of the Maharashtra Academy of Sciences (MASc) Pune; Fellow of Gokhale Education Society, Nashik, and also a member of several national and international committees and task forces, holding active positions in many of them.

Dr. Vijay Bhatkar received the **Doctor of Philosophy (Ph.D.)** degree in **Engineering** from the Indian Institute of Technology, Delhi in 1972. He obtained his Master of Engineering from M.S. University, Baroda in 1968, and Bachelor of Engineering from Nagpur University in 1965. He is also the recipient of **D.Sc. (Honoris Causa) of Padmashri D. Y. Patil University** in 2011.

Dr. Bhatkar is the **Founder Executive Director of the Centre for Development of Advanced Computing (C-DAC)**, which is India's national initiative in supercomputing where he led the development of PARAM Supercomputers. When India was denied the supercomputer by USA, **Dr. Bhatkar took the challenge of developing an indigenous supercomputer in a record time**

**of 3 years and delivered PARAM 8000, India's first supercomputer in 1991 and went on to build PARAM 10000 IN 1998**, propelling India into the exclusive club of select five nations, who possessed this strategic technology. Presently, he is advancing the architecture for petascale computing in India. Based on PARAM series of supercomputers, Dr. Bhatkar built the **National Param Supercomputing Facility (NPSF)**, which is one of the largest supercomputing facilities of Asia. At NPSF, he led the development of several high-performance computing applications in collaboration with national as well as international user agencies. Around NPSF, he then led the foundation for building High Performance Computing and Communications (HPCC) Grid for education and research which now is called Garuda Grid by C-DAC. Presently he is working on the **Exascale supercomputing project** to be pursued as a national mission of India.

Simultaneously, **in a multilingual country of 1 billion plus people, where only 7 percent speak English, Dr. Bhatkar launched and nurtured a mission for developing multilingual technology encompassing all languages of India.** In this mission, the celebrated GIST multilingual technology was developed which made possible the use and co-existence of all Indian languages along with English on standard computers, dissolving the language barrier on computers once for all in a multi-lingual country like India with 22 official languages having 10 diverse scripts.

Faced with the challenges of creating a large number of software professionals in a shortest possible time, Dr. Bhatkar founded the **Advanced Computing Training School (ACTS)** in C-DAC, which over the years has provided over **10,000 software professionals** to the IT industry and many of them have made both impact and name for themselves in India as well as US and other advanced countries. This was his major contribution to India's IT industry in the 90s. Earlier, **the development of Param series of supercomputers had propelled the image of India as an emerging power in computing and information technology across the world.** Concurrently with C-DAC, he held the position of Advisor in the Department of Electronics (now Ministry of Information Technology), Government of India. He was the National Project Director of the UNDP assisted projects – Appropriate Automation Promotion Programme (AAPP), Knowledge Based Computer System Program (KBCS) and Fiber-Optic System and Applications Program (FOSAPP). Earlier, during 1972-80, he was a core member of the **Information, Planning & Analysis Group (IPAG) of Electronics Commission of Government of India** where he created the appropriate **Automation Promotion Laboratory** for promotion of automation & control in Indian industries.

Prior to C-DAC, in 1987, he was Vice President of Tata Consultancy Services (TCS), which is India's largest software enterprise. He was the Director of Electronics Research and Development Centre (ER&DC), Trivandrum from 1980-87, which, under his direction, emerged as India's largest R&D Centre in electronics. At ER&DC, he led the development of several new products and systems leading to large-scale commercialization. ER&DC has since been brought under the umbrella of C-DAC. Concurrently, he was also the Executive Director of KELTRON, India's first state electronics development corporation, which became a source of inspiration to a chain of several other state corporations in different states of India. At KELTRON, he implemented some of the largest projects in electronics and IT in the 80's such as India's first colour television and colour broadcasting, a spectrum of early microprocessor based systems,

computerization of Calcutta Metro, security system for government, simulators for defence, and, most importantly, distributed computer control systems for large power grid, power plants and process industries of India. Through this process he contributed to the **ushering of electronics revolution in India in the 80's**.

He has been one of the architects of **liberalization of the Internet** in India for which he co-created ETH Ltd. and went on to **pioneer broadband in India**, including the **first deployments of Wi-Fi and WiMAX technologies**, By co-founding Divinet, an innovation based start-up, he also led the **development of multi-play technology** in India and its use for remote learning and teaching.

Dr. Bhatkar also envisioned and architected the **International Institute of Information Technology (I<sup>2</sup>IT) for advanced education and research in IT**. I<sup>2</sup>IT is planned as **India's largest high-end education institute with post-graduate education and research facilities for over 2000 students**. I<sup>2</sup>IT was dedicated to the nation by the President of India on 28<sup>th</sup> May 2003. Dr. Bhatkar has also been a founder member and a member of the Governing Board of Indian Institute of Information Technology and Management, Kerala (IIITM-K), Trivandrum promoted by Government of Kerala. He has been a member of the International Advisory Committee of **Amrita Vishwa Vidyapeetham**.

For bringing education directly to home he created **ETH Research Lab** where he pioneered the computer literacy program which was taken forward on a large scale by confounding Maharashtra Knowledge Corporation Limited (MKCL). Today, **MKCL has created a sort of history by making over 5.5 million people computer literate in a span of 6 years**. At ETH he is now bringing the benefits of ICT in schools for learning, teaching, administration and communication and collaboration. **The mission is to reach 10000 schools in 3 years since its launch in March 2009**.

For transforming education, he advanced the concept of **integral education** and founded the **India International Multiversity (IIMv)** of which he is presently the Founder Chancellor. The IIMv is a multi-campus university founded on Indian knowledge system addressed to aspiring learners across the world. Through IIMv, he is implementing several path-breaking projects relating to resurrection of India's ancient Gurukul system of learning and transformation of pilgrimage places into knowledge pilgrimage places through ICT, and bringing IT to the masses.

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