

---

---

# Acknowledgments

We alphabetically list and acknowledge all scientists, engineers, academicians, expert professionals, and research students whose work helped us to understand and create the content of this textbook. While we attempted to include everyone, we apologize for any potential inaccuracy in the list.

- Réka Albert, Department of Physics, Pennsylvania State University, University Park, PA, USA.
- Babak Ayazifar, Department of Electrical Engineering and Computer Science, University of California, Berkeley, CA, USA.
- Venkataramana Badarla, Indian Institute of Technology Jodhpur, Ratanada, Rajasthan, India.
- Paolo Banelli, Department of Electronic and Information Engineering, University of Perugia, Perugia, Italy.
- Albert László Barabási, Department of Physics, Northeastern University, Boston, MA, USA.
- Sergio Barbarossa, Department of Information Engineering, Electronics and Telecommunications, Sapienza University of Rome, Italy.
- Danielle S. Bassett, Department of Bioengineering, University of Pennsylvania, Philadelphia, PA, USA.
- Pierre Borgnat, Laboratoire de Physique, ENS de Lyon, Lyon, France.
- Michael M. Bronstein, Institute of Computational Science, Università della Svizzera Italiana, Lugano, Switzerland.
- Joan Bruna, Courant Institute of Mathematical Sciences, New York University, New York, NY, USA.
- G. Caldarelli, Department of Physics, IMT School for Advanced Studies Lucca, LU, Italy.

- 
- Paulo Cardieri, Department of Communications, State University of Campinas, São Paulo, Brazil.
  - Rajarathnam Chandramouli, Department of Electrical and Computer Engineering, Stevens Institute of Technology, Hoboken, NJ, USA.
  - Fan R. K. Chung, Department of Mathematics, University of California, San Diego, CA, USA.
  - Ronald Coifman, Department of Mathematics, Yale University, New Haven, CT, USA.
  - Pamela Cosman, Department of Electrical and Computer Engineering, University of California, San Diego, San Diego, CA, USA.
  - Mark Crovella, Department of Computer Science, Boston University, Boston, MA, USA.
  - Uday B. Desai, Department of Electrical Engineering, Indian Institute of Technology Hyderabad, Khandi, Telengana, India.
  - Sujit Dey, Department of Electrical and Computer Engineering, University of California, San Diego, San Diego, CA, USA.
  - Aleksandar Dogandžić, Department of Electrical and Computer Engineering, Iowa State University, Ames, IA, USA.
  - Sergey Dorogovtsev, Department of Physics, University of Aveiro, Aveiro, Portugal.
  - Pier Luigi Dragotti, Department of Electrical and Electronic Engineering, Imperial College London, London, United Kingdom.
  - Magnus Egerstedt, School of Electrical and Computer Engineering, Georgia Institute of Technology, Atlanta, GA, USA.
  - Ernesto Estrada, Department of Mathematics and Statistics, University of Strathclyde, Glasgow, UK.
  - Antonio Luis Ferreira, Department of Physics, University of Aveiro, Aveiro, Portugal.
  - Eric Fleury, Computer Science Department, ENS Lyon, Lyon, France.
  - Massimo Franceschetti, Department of Electrical and Computer Engineering, University of California, San Diego, San Diego, CA, USA.
  - Antony Franklin, Department of Computer Science and Engineering, Indian Institute of Technology Hyderabad, Khandi, Telengana, India.
  - Pascal Frossard, Institute of Electrical Engineering, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland.

- Georgios B. Giannakis, Department of Electrical and Computer Engineering, University of Minnesota, Minneapolis, MN, USA.
- Benjamin Girault, Department of Electrical Engineering, University of Southern California, Los Angeles, CA, USA.
- Kwang-Il Goh, Department of Physics, Korea University, Seoul, South Korea.
- Alexander Goltsev, Department of Physics, University of Aveiro, Aveiro, Portugal.
- Paulo Gonçalves, INRIA, France.
- Sai Subrahmanyam Gorthi, Department of Avionics, Indian Institute of Space Science and Technology, Thiruvananthapuram, Kerala, India.
- Deepak Thazhungal Govindan, Department of Mathematics, Indian Institute of Space Science and Technology, Thiruvananthapuram, Kerala, India.
- Rajesh Gupta, Department of Computer Science and Engineering, University of California, San Diego, San Diego, CA, USA.
- Neelima M. Gupte, Department of Physics, Indian Institute of Technology Madras, Chennai, Tamil Nadu, India.
- Priyadarshanam Hari, Department of Avionics, Indian Institute of Space Science and Technology, Thiruvananthapuram, Kerala, India.
- César A. Hidalgo, Media Arts and Sciences, MIT, Cambridge, MA, USA.
- Tara Javidi, Department of Electrical and Computer Engineering, University of California, San Diego, San Diego, CA, USA.
- H. Jeong, Department of Physics, Korea Advanced Institute of Science and Technology, Daedeok Innopolis, Daejeon, South Korea.
- Byungnam Kahng, Department of Physics and Astronomy, Seoul National University, Seoul, South Korea.
- Eric Kolaczyk, Department of Mathematics and Statistics, Boston University, Boston, MA, USA.
- Jelena Kovačević, Department of Electrical and Computer Engineering, Carnegie Mellon University, Pittsburgh, PA, USA.
- Dilip Krishnaswamy, IBM India Research, Bangalore, Karnataka, India.
- Anurag Kumar, Department of Electrical Communication Engineering, Indian Institute of Science, Bangalore, Karnataka, India.

- C. V. Anil Kumar, Department of Mathematics, Indian Institute of Space Science and Technology, Thiruvananthapuram, Kerala, India.
- Shine Lal E., Department of Mathematics, Government College Chittur, Palakkad, Kerala, India.
- Yann LeCun, Facebook AI Research, New York, NY, USA.
- Geert Leus, Faculty of Electrical Engineering, Mathematics and Computer Science, Delft University of Technology, The Netherlands.
- László Lovász, Department of Computer Science, Eötvös Loránd University, Budapest, Hungary.
- Mauro Maggioni, Department of Mathematics, Johns Hopkins University, Baltimore, MD, USA.
- D. Manjunath, Department of Electrical Engineering, Indian Institute of Technology Bombay, Mumbai, Maharashtra, India.
- Antonio G. Marques, Department of Signal Theory and Communications, King Juan Carlos University, Madrid, Spain.
- Gonzalo Mateos, Department of Electrical and Computer Engineering, University of Rochester, Rochester, NY, USA.
- José Fernando Mendes, Department of Physics, University of Aveiro, Aveiro, Portugal.
- Mehran Mesbahi, Department of Aeronautics and Astronautics, University of Washington, Seattle, WA, USA.
- Deepak Mishra, Department of Avionics, Indian Institute of Space Science and Technology, Thiruvananthapuram, Kerala, India.
- José M. F. Moura, Department of Electrical and Computer Engineering, Carnegie Mellon University, Pittsburgh, PA, USA.
- C. Siva Ram Murthy, Department of Computer Science and Engineering, Indian Institute of Technology Madras, Chennai, Tamil Nadu, India.
- Hema A. Murthy, Department of Computer Science and Engineering, Indian Institute of Technology Madras, Chennai, Tamil Nadu, India.
- Selvagesan Narayanasamy, Department of Avionics, Indian Institute of Space Science and Technology, Thiruvananthapuram, Kerala, India.
- Mark Newman, Department of Physics, University of Michigan, Ann Arbor, MI, USA.

- Antonio Ortega, Signal and Image Processing Institute, Department of Electrical Engineering, University of Southern California, Los Angeles, CA, USA.
- Romualdo Pastor-Satorras, Department of Physics, Universitat Politècnica de Catalunya, Barcelona, Catalonia, Spain.
- Michael Rabbat, Department of Electrical and Computer Engineering, McGill University, Montreal, Canada.
- K. R. Ramakrishnan, Department of Electrical Engineering, Indian Institute of Science, Bengaluru, Karnataka, India.
- Kannan Ramchandran, Department of Electrical Engineering and Computer Science, University of California, Berkeley, CA, USA.
- Sheeba Rani J., Department of Avionics, Indian Institute of Space Science and Technology, Thiruvananthapuram, Kerala, India.
- Bhaskar Rao, Department of Electrical and Computer Engineering, University of California, San Diego, San Diego, CA, USA.
- Ramesh R. Rao, Department of Electrical and Computer Engineering, University of California, San Diego, San Diego, CA, USA.
- Balaraman Ravindran, Department of Computer Science and Engineering, Indian Institute of Technology Madras, Chennai, Tamil Nadu, India.
- Sidney Redner, Department of Physics, Santa Fe Institute, Santa Fe, NM, USA.
- Alejandro Ribeiro, Department of Electrical and Systems Engineering, University of Pennsylvania, Philadelphia, PA, USA.
- Santiago Segarra, Institute for Data, Systems, and Society, Massachusetts Institute of Technology, Cambridge, MA, USA.
- David Shuman, Department of Mathematics, Statistics, and Computer Science, Macalester College, Saint Paul, MN, USA.
- Aarti Singh, Machine Learning Department, Carnegie Mellon University, Pittsburgh, PA, USA.
- Daniel A. Spielman, Department of Computer Science, Yale University, New Haven, CT, USA.
- Steven Strogatz, Department of Mathematics, Cornell University, Ithaca, NY, USA.
- Vineeth Bala Sukumaran, Department of Avionics, Indian Institute of Space Science and Technology, Thiruvananthapuram, Kerala, India.

- Arthur Szlam, Facebook AI Research, New York, NY, USA.
- Bheemarjuna Reddy Tamma, Department of Computer Science and Engineering, Indian Institute of Technology Hyderabad, Khandi, Telengana, India.
- Yuichi Tanaka, Graduate School of BASE, Tokyo University of Agriculture and Technology, Tokyo, Japan.
- Gabriel Taubin, School of Engineering, Brown University, Providence, RI, USA.
- David B. H. Tay, Department of Engineering, La Trobe University, Melbourne, VIC, Australia.
- Gabor Timar, Department of Physics, University of Aveiro, Aveiro, Portugal.
- Mohan Trivedi, Department of Electrical and Computer Engineering, University of California, San Diego, San Diego, CA, USA.
- P. P. Vaidyanathan, Department of Electrical Engineering, California Institute of Technology, Pasadena, CA, USA.
- Pierre Vanderghenst, Institute of Electrical Engineering, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland.
- Nalini Venkatasubramanian, Department of Computer Science, University of California, Irvine, Irvine, CA, USA.
- Venkatesh T., Indian Institute of Technology Guwahati, North Guwahati, Assam, India.
- Duncan J. Watts, Microsoft Research, New York, NY, USA.
- Zhengdao Wang, Department of Electrical and Computer Engineering, Iowa State University, Ames, IA, USA.
- Jingxin Zhang, School of Software and Electrical Engineering, Swinburne University of Technology, Melbourne, VIC, Australia.
- Xiao-Ping Zhang, Department of Electrical and Computer Engineering, Ryerson University, Toronto, Canada.