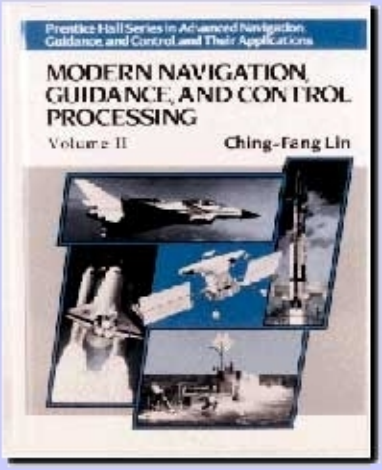
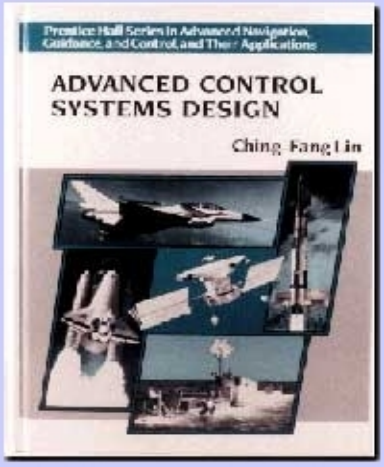
Founder

Dr. Ching-Fang Lin

Dr. Lin is the founder of the American GNC Corporation and the driving force behind AGNC's many accomplishments. Dr. Lin began his illustrious career at the University of Michigan in Ann Arbor, where he received his Ph.D. degree in Computer, Information, and Control Engineering in 1980. During his teaching career at the University of Michigan in Ann Arbor and at the University of Wisconsin in Madison, he consistently pursued several areas of critical importance to modern technology and carefully evaluated, in both theory and practice, the implications of their development and integration. Dr. Lin authored over 400 technical publications and was responsible for over 100 patents and patent applications. Over the same time period, he was responsible for over 1,000 government contract reports. In the last ten years, he led the effort to introduce over 30 GNCC products. With a rare combination of talents that allowed him to be a leader in creating highly successful products, based on a thorough understanding of advanced technical principles. These talents were manifest in the world's first and still best selling book series by Prentice Hall on GNCC systems and their applications, including GPS in 1990.



1990: The author of the first book series and the first best-selling book on Guidance, Navigation, Control, Communication & GPS Systems and Applications



1993: The author of the first Advanced Control Systems Design Book

Dr Lin's career spans more than 25 years of teaching, research, industrial applications work, and senior management within the fields of guidance, navigation, control, and Communication (GNCC). He developed a miniature size, coremicro IMU, which is low cost and uses little power. It represents a unique product that has immensely expanded the applicability of navigation systems. The many projects that Dr. Lin has been responsible for have applications encompassing personnel tracking, aircraft, marine vessels, ground transportation vehicles, missiles, spacecraft, armored vehicles, helicopters, submarines, robotics, space structures and uninhabited air/underwater vehicles.

As a world class and prolific researcher, Dr. Lin made fundamental and diverse contributions to GNCC. His work is of the highest quality and is broadly utilized. He addressed and solved many important problems in the development of modern high tech systems. One of the excellent attributes of this research is the proper balance he achieved between theory and its applicability to real world GNCC problems. This work is well known and regarded by his peers. His visionary pursuit of advanced research and technology impacts a broad range of critical areas such as ground/mix air proximity warning systems, spacecraft docking systems, robotics, intelligent autonomous hierarchical information, autonomous decision and control, "Modeling, Design, Analysis, Simulation and Evaluation" (MDASE), and environment recognition and adaptation. He recognized the full potential for current methods and adopted far-sighted approaches to future problems. Dr. Lin developed innovative products and methods, procedures, algorithms, hardware and software tools for the analysis, design, simulation and evaluation of autonomous systems. This multidisciplinary approach to intelligent vehicle control is an integrated GNCC system blending the most powerful elements of modern theory within a practical framework. The system includes several different types of advanced sensors, such as: hyperspectral, visible, infrared, laser ranging, passive millimeter-wave imaging devices, and multiple sensor configuration navigation systems, such as AGNC designed Fully-Coupled GPS/INS systems incorporating the coremicro IMU. Dr. Lin developed extensive GNCC techniques which provide effective, reliable, and inexpensive means to enhance flight safety. He also developed the design of collision avoidance systems that detect and react to safe flight/driving threats.

He has been recognized for his exceptional achievements by both business and engineering leaders worldwide. A list of these achievements and organizations follows:

Achievements & Awards

- SBA Small Business Person of the Year 2002
- NASA Space Act Award Recognition for Inventions and Scientific and Technical Exceptional Contributions
- Multiple Multiyear NASA Innovative Invention Award
- Donald P. Eckman Award Nominee for Outstanding Control Engineer

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- Nominee for the Mechanics and Control of Flight Award
- Who's Who in Leading American Executives
- Five Hundred Leaders of Influence in the World
- The International Who's Who of Intellectuals
- Who's Who in Science and Engineering
- Two Thousand Notable American Men
- "Man of the Year - 1993" of the International Biographical Association
- "Most Admired Man of the Decade" of the American Biographical Institute

Organizations & Memberships

- General Chairman of the First IEEE Conference on Aerospace Control Systems in 1993
- Honorary General Chairman of the 1995 International Conference on Control and Information
- Organizing Committee Chairman of the 1996 International Conference on GPS
- 1987 - 1995 Special Events Chairman for the American Control Conference
- Eminent Fellow/Research Board of Advisors for the American Biographical Institute
- Fellow of the International Biographical Association, Cambridge, England
- 1992-2000 Member and Awards Chairman of AIAA Guidance, Navigation and Control Technical Committee
- 2001-2005 Member of the AIAA Aerospace Traffic Management Technical Committee
- Sigma Xi & Tau Beta Pi
- Associate Fellow of AIAA
- Senior Member of IEEE & CSS
- Avionics Software Chairman and Committee Member for the IEEE Working Group on Computational Issues
- 1980 - 2000 Operating Committee Member & Technical Program Chair for AIAA, IEEE, SCS and SAE Sponsored Conferences
- NASA Cross Enterprise Technology Development Program Panel Member and Non-Advocate Reviewer

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