

EXPERIENCE

Techno-economic strategist, whose work is informed by backgrounds in finance, top-level management consulting, entrepreneurship/startup management and technology.

2019 - AVANTUS **Sr. Director, Innovation & Technology** **Los Angeles / San Diego**

Avantus is a clean energy major with core strengths in utility-scale solar power. At Avantus, I lead innovation- and technology-related initiatives including:

- developing the company's IP strategy, building and growing our patent portfolio;
- supporting business development activities with techno-economic analyses of new technologies, new powerplant architectures and new business opportunities;
- supporting development of internal business processes and process tools;
- corporate special projects.

2005 - 2018 AB BERNSTEIN **Research Analyst, Vice President - Global Aerospace & Defense** **New York**

I worked with Senior Analyst Doug Harned on a team ranked 1, 2 or 3 by Institutional Investor through 2017. Identified business and valuation implications of market, economic, technological, (geo)political, legal, policy and company-specific developments (e.g., pensions, currency hedging, M&A/spinoffs). Researched demand for commercial & business aircraft (e.g., airliners, business jets, jet engines, avionics) and defense products (e.g., vehicles, ships, spacecraft, electronics). Communicated recommendations to clients verbally and in formal reports.

Covered companies: Airbus, BAE Systems, Boeing, General Dynamics, Huntington Ingalls, Lockheed Martin, Meggitt, MTU Aero Engines, Northrop Grumman, Raytheon, Rockwell Collins, Rolls-Royce, Safran, Spirit AeroSystems, United Technologies.

1999 - 2004 **Entrepreneur** **San Diego**

- **Dock3:** Co-founder, Chief Technology Officer (2000-2004). Dock3 was a venture-backed, branded provider of online & on-site employee services (dry cleaning, DVD rental, package shipping/receiving, auto care, discounts). Clients included Boeing, Bristol Myers Squibb, Computer Associates, GE Aircraft Engines, Intel.
- **1st Avenue Capital:** Co-founder (2004). Made loans against hangars on leased airport property.
- **Irvine Sensors:** Business development (1999). Developing commercial spinoffs using defense technologies.

1993 - 1998 McKINSEY & Co. **Senior Manager** **Los Angeles**

Consulting support to top management of major corporations. Work included: **electric utilities/power markets** (strategy, asset valuation, business models, game theory during the California electricity "deregulation"); **integrated global oil** (strategy); **consumer electronics** (intellectual property valuation); **quick-service restaurants** (concept evaluation); **defense** (cost reduction); **newspaper** (cost reduction); **motion picture company** (cost reduction).

EDUCATION

Ph.D., Electrical Engineering	California Institute of Technology (Caltech)
Bachelor of Engineering (Electrical and Electronic)	National University of Ireland
Chartered Financial Analyst	CFA Institute

OTHER

- Former Registered Representative, FINRA Series 7, 63, 86, 87.
- FAA-licensed pilot of airplanes, gliders and UAVs, with pilot experience from hang gliders to jet fighters.