

Stephen Coggeshall, stevecoggeshall@gmail.com
Data Scientist Leader, Entrepreneur, Technology Executive, Professor

Dr. Stephen Coggeshall is the retired Chief analytics and science officer at ID Analytics, an identity fraud protection company owned by LifeLock and Symantec. He was the founding CTO of ID Analytics where he built the analytics team and helped design the technical solution approach. Prior to ID Analytics Coggeshall worked for 11 years as a researcher in nuclear fusion at the Los Alamos National Laboratory. In addition to ID Analytics, Dr. Coggeshall also cofounded the analytics consulting companies CASA (acquired by HNC Software/FICO) and Los Alamos Computational Group (acquired by Morgan Stanley). His expertise is in forming and managing teams of data scientists to attack complex business problems using advanced algorithms on big data. He has deep expertise in consumer behavior modeling, optimization, forecasting and financial engineering, and spent the past 15 years focusing on identity fraud dynamics.

Dr. Coggeshall holds undergraduate degrees in math, music and physics. He has a master's in music and a master's and Ph.D. in nuclear engineering from the University of Illinois. He currently is a Professor at USC and UCSD teaching classes on Fraud Analytics and Business Analytics.

Business Expertise: Cofounder, CTO, President and CEO of technical companies; Machine learning/advanced analytics around very large data flows; Modeling of consumer behavior, financial engineering, econometric forecasting; Creative development of practical technical solutions to difficult business problems; Assembly and leadership of teams of advanced algorithmic scientists. Data strategy for new products and services.

Technical Expertise: Machine learning, Modeling, Algorithm development, Data strategy

Principal Roles

- Professor of Business Analytics
- Cofounder and Chief Technology Officer of VC-backed technology company (ID Analytics)
- Cofounder (CASA, LACG) and CEO (LACG) of technical consulting companies
- Building and leading data science teams to create new solutions to challenging business problems
- Client interaction, technical sales, project definition, complex project management
- Strategic business directions, new product identification and development, strategic data management

Career

USC Marshall (1/2016 to present), UCSD Rady (7/2017 to present)

Teaching graduate data science business class: Fraud Analytics, Business Analytics

ID Analytics (10/2005 to 7/2017, retired)

Chief Technology Officer/Chief Analytics and Science Officer, led a team of advanced data scientists to create and build products for identity-related analytical solutions, including identity fraud protection, authentication, credit risk and account management. Responsible for the corporate R&D roadmap and execution.

Morgan Stanley (3/2004 to 9/2005)

Assembled and led a team of applied data scientists in Los Alamos. Ran a proprietary derivatives trading process. R&D in the areas of corporate valuations, asset allocation, analysis of financial advisors, portfolio optimization, proprietary trading algorithms for stocks, equity options and convertible bonds.

Los Alamos Computational Group (LACG) (5/2002 to 2/2004)

Cofounder, President and CEO. Negotiated initial multi-year, multi-million dollar contract. LACG employed six scientists who provided technical consulting to Morgan Stanley in the areas of modeling and forecasting for financial instruments (equity options and convertible bonds), retail investors and financial advisors.

ID Analytics (5/2002 to 5/2003)

Cofounder and Chief Technology Officer. Helped in securing VC financing. Participated in high-level client sales calls and product development. Identified product solution paths, hired and supervised technical team during the company's first year.

HNC Software (3/2000 to 5/2002)

Group Vice President, Technology Development, reported to HNC President. Managed group of 45 software engineers and scientists building new technology software platform and developing new algorithmic solutions to modeling, simulation, and optimization. Built the core of a new suite of applied solutions that work across business silos to answer critical, high-level questions.

Center for Adaptive Systems Applications (CASA) (7/1995 to 3/2000)

Cofounder and Principal. Assembled and managed technical group applying advanced data mining and adaptive computing algorithms to problems in consumer behavior. Worked with clients in Financial Services and Telecommunications to solve difficult problems using sophisticated analytics to improve client profitability. Led group developing new applied algorithms in the areas of nonlinear regressions, feature selection, modeling, segmentation, clustering, decision trees, fuzzy logic and neural nets.

Los Alamos National Laboratory, Technical Staff Member, X Division (9/1984 to 6/1995)

Performed extensive research into laser fusion target design. Formulated and analyzed experiments involving laser-plasma interactions. Specialist in radiation hydrodynamics and Lie groups applied to differential equations. Over 50 technical publications, including invited international papers and book chapters in the fields of laser fusion, radiation hydrodynamics and Lie groups.

Education (B.S., B.A., M.S., M.M., Ph.D.)

University of Illinois, Urbana, IL 8/79 – 8/84:

Ph.D., Nuclear Engineering 8/84

Masters in Music 5/84

M.S., Nuclear Engineering 1/82

Southern Illinois University at Edwardsville, 8/74 – 8/79:

B.S., Mathematics/Physics 3/79

B.A., Music 8/78

Patents

- A Method and System for Evaluating Customers of a Financial Institution Using Customer Relationship Value tags (European Patent EP1005683, 2000; U.S. 7376603, 2008; 8600854, 2013)
- Market Selection Optimization Process (U.S. 6847934, 2005; 7076442, 2006; 7346540, 2008)
- System and Method for Identity-Based Fraud Detection Using a Plurality of Historical Identity Records (U.S. 7686214, 2010)

- System and Method for Identity-Based Fraud Detection for Transactions Using a Plurality of Historical Identity Records (U.S. **7793835**, 2010)
- System and Method for Credit Scoring Using an Identity Network Connectivity (U.S. **8386377**, 2013)
- Identity Manipulation Detection System and Method (U.S. **8918891**, 2014)
- System and method for Systematic detection of Fraud Rings (U.S. **9280658**, 2016)
- Others pending

Awards

- Los Alamos National Laboratory Distinguished Performance, 1996
- Los Alamos National Laboratory Entrepreneur of the Year, 1998
- San Diego Technology Executive of the Year, 2008
- San Diego Technology Executive Lifetime Achievement Award, 2012

Book Published: *Foundations of Predictive Analytics*, James Wu and Stephen Coggeshall, CRC Press, 2012

Activities/Outside Interests: Active in music as a conductor and singer. Director of St Therese of Carmel Church Choir since 2007.