

ALBERT ESSIAM, PHD

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RESEARCH & DATA ANALYST

Technology | Energy | Finance

I am a seasoned Research and Data Analyst with more than 20 years of experience enabling organizations to make profitable and effective decisions by providing detailed data analysis and interpretation. I leverage my educational background in engineering, probability, statistics, and risk assessment with hands-on project management, consulting, and modeling/forecasting experience to promote enterprise-wide success. I am skilled at pricing strategy development, strategic planning, and cost control. I have exceptional problem solving skills, with clear communication abilities that result in informative presentations and rich, loyal, and mutually beneficial relationships with managers, executives, and team leaders.

CORE COMPETENCIES

Thought Leadership: Innovative and results-focused leader with extensive and diverse background in analytics and research. Demonstrated ability to partner with cross-industry managers at various organizations, identifying areas in need of improvement and cost-effective, practical solutions.

Project Management: Credited with directing enterprise-wide, mission-critical, and high-stakes projects by determining strategic direction and monitoring to ensure alignment with quality and client objectives. Adept at developing methodologies, systems, and procedures that maximize results without incurring additional costs.

Team Leadership/Management: Proven success in guiding teams to meet and exceed expectations by posing key questions, proposing innovative solutions, and encouraging collaboration.

PROFESSIONAL EXPERIENCE

WNS GLOBAL SOLUTIONS, Jersey City, NJ

01/2016 – 04/2016

Vice President of Claims Analysis

- Managed consulting projects related to insurance claims data analysis.
- Applied Big Data Technologies such as Hive, Scope and Apache Spark to analyze data
- Designed and built quantitative statistical models to address various profit leakage sources such as claims fraud, pricing and underwriting using machine learning and various statistical modeling approaches
- Applied text mining analytics to detect fraudulent claims

RISK MATRIX CONSULTING, Boston, MA

04/2013 – 06/2015

Consultant

- Saved 5-10% of total annual loss for workers compensation book of business by creating triaging model that determined claim risk level, allowing for transfer of high-risk claims to experienced claim handlers.

- Created data warehouses and analytical databases for companies to enhance their data mining capabilities
- The claim notes helped the claims handling team to quickly flag potentially high cost claims and to triage claims to handlers with the appropriate level of experience.
- Minimized loss by developing homeowners pricing strategy that determined high-risk zip codes and their associated high tail values risk, allowing insurer to differentiate pricing.
- Hedged against high-loss events by creating reinsurance pricing model that helped insurer understand pricing.

THE TRAVELERS COMPANIES, INC., Hartford, CT

06/2007 – 09/2012

Managing Director – Catastrophe Strategy & Analysis

- Expanded corporate understanding of enterprise-wide exposure to catastrophic perils by directing strategic framework design for management of operational risks/research and development projects.
- Slashed licensing fees by \$1M while sharpening approach to terrorism, tornado, and hail risks by upgrading models for computing and trending impact on loss ratios and portfolio metrics.
- Amplified business processes and risk reduction methods by heading initiatives that identified promising new technology prospects for potential implementation.
- Equipped company to make strategic decisions by developing risk prioritization framework, exposure aggregation assessments/CAT strategy, and enterprise risk assessment studies by using Big Data analytical technologies to identify potential high loss contracts and claims

LIBERTY MUTUAL INSURANCE COMPANY, Boston, MA 2003 – 2007

Senior Consultant – Corporate Research & Strategy Group

- Optimized processes by collaborating with senior executives to define supporting “strategy map” at corporate, business unit, and operational levels, serving in key leadership role as essential and well-regarded adviser.
- Empowered senior leaders to make informed decisions regarding allocation of capital and other resources pertaining to financial and competitive analysis, operations analysis, market positioning, and segmentation.
- Enabled forward-focused decision making by guiding predictive modeling team to create economic, financial, and quantitative risk selection models for enhancements in product pricing and risk selection.
- Applied Big Data Analytics to segment customer base, identify profit opportunities, to uncover hidden patterns, unknown correlations, market trends, customer preferences and other useful business information
- Adapted Apache Spark to enable users to run large-scale data analytics applications across clustered systems

MCKINSEY & COMPANY, Atlanta, GA 2001 – 2003

Senior Associate – Management Consulting

- Advanced high-profile projects by collaborating on strategy planning, operational improvement, and performance management as key member of innovative team.
- Motivated company to deliver on growth objectives through transactional pricing by performing pricing analysis on petrochemical products for key petrochemical company client.
- Improved agent scheduling capabilities for energy company by identifying gaps/opportunities in call center and field service operations and creating statistical model to forecast peak and non-peak times.
- Transformed declining market share for telecom company client by renegotiating significant cost savings with CLECs to reduce prices in exchange for broader product range.

EDUCATIONAL BACKGROUND

PhD in Civil & Environmental Engineering, Massachusetts Institute of Technology (MIT),
Cambridge, MA

Specialization: Probability & Statistical Theory & Stochastic Processes

Doctoral Dissertation: Stochastic Flow and Transport through Multifractal Porous Media

Distinctions: Office of Naval Research Fellow, Member of Sigma Xi, & Recipient of Two MIT Fellowships

Master of Science in Civil & Environmental Engineering, Massachusetts Institute of Technology
(MIT), Cambridge, MA

Master's Thesis: Risk Assessment for Contaminated Sites

Distinction: Developed mathematical model for predicting risk of certain pollutants in environment and decision model to determine economical way to remediate pollutants

MIT Certified Big Data Analyst - 2015

PUBLICATIONS

Veneziano, D and A. K. Essiam, Flow Through Random Media with LognormalMultifractal Hydraulic Conductivity 2. Spectral Tensors, Macrodispersivity and Effective Hydraulic Conductivity, Submitted to Water Resources Research, 2004

Thesis (M.S.)--Massachusetts Institute of Technology, Dept. of Civil and Environmental Engineering, 1995. Includes bibliographical references (p. 98-101). by Albert K. Essiam. M.S.

Veneziano, D. and Essiam, A.K. (2003). Flow through porous media with multifractal hydraulic conductivity. Water Resources Research 39: doi: 10.1029/2001WR001018. issn: 0043-1397.

Veneziano, D. and Essiam, A.K. (2003). Nonlinear spectral analysis of flow through multifractal porous media. **Article in Chaos Solitons & Fractals** 19(2):293-307 · December 2003
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