PEPPERDINE | GRAZIADIO

BUSINESS SCHOOL

MSBA Program Overview: Meet Your Faculty

Dr. Erik Krogh
MS in Business Analytics
Program Chair and Practitioner
Lecturer of Information Systems
and Technology Management

Introducing: Samuel Seaman, PhD

SPECIAL GUEST

Professor of Decision Sciences

Education
PhD, The University of Florida
BA Stetson University

Background
Samuel is passionate about solving practical business problems and has a research agenda that focuses on mathematical models in economics, healthcare, sociology, and the arts.
He leads the "Numerical Enquiry & Innovative Logic" group at Alchemetric Consulting and has also worked closely with diverse corporate clients and nascent nonprofits, helping them aggregate fragmented data and integrate best practice with persuasive design to delight customers. His true passion, time permitting, is the ongoing search for an optimal solution to the "Particle/Wave Duality Paradox" in his "lab" at Malibu's Surfrider Beach.

Role at Pepperdine
Samuel is professor of Decision Sciences in the Graziadio School of Business & Management, and teaches graduate courses in applied statistics and evidence-based decision analysis

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Introducing: Alfonso Berumen

SPECIAL GUEST

Lecturer, Decision Sciences

Education
Doctor of Business Administration, Pepperdine University
MS in Predictive Analytics, Northwestern University
MBA, UC Irvine
BA in Economics, Occidental College

Background
Alfonso Berumen has over 10 years of experience in consulting where he has provided data-driven economic, statistical, and analytical support to law firms, Fortune 500 companies, government agencies, and private companies operating in a wide range of industries. He is currently an independent analytics and strategy consultant. Recently, he was featured in a LinkedIn Learning course: A Day In The Life of a Data Scientist

Role at Pepperdine
Faculty since October 2019 while completing doctoral program courses at Graziadio and dissertation research under the direction of Dr. John Mooney.

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Introducing: Erik Krogh, PhD

SPECIAL GUEST

Program Chair of the MS in Business Analytics Program

Education
PhD, Information Systems, Claremont Graduate University
MBA, University of Southern California
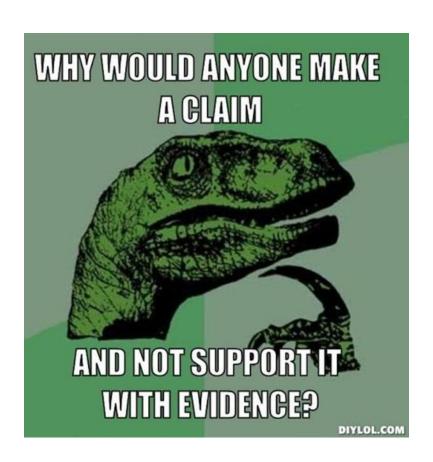BSM, Pepperdine University, Magna Cum Laude

Background
Information Systems practitioner experience spans 22 years. He began his career as a data analyst, rose to the rank of Divisional CIO. His IS experience spans multiple industries, including financial services, supply chain/manufacturing, and government contracting.
He spent his IS practitioner career working in a variety of technical and managerial roles for companies ranging in size from small start-ups to large IT integrators, such as Computer Sciences Corporation. He previously held management positions at Indymac Bank, Hewlett-Packard, and ARAMARK Uniform Services.

Role at Pepperdine
Full-time member of the Pepperdine Graziadio Business School faculty since 2014, and became the Program Chair of the business school's MS in Business Analytics program in 2017.

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Congratulations on Joining the Pepperdine MSBA Learning Community!

Evidence-Based Management

Evolution of "Analytics" and Evidence-Based Management

The Future of Jobs Report 2023

Download PDF ⬇

The Future of Jobs Report 2023 explores how jobs and skills will evolve over the next five years. This fourth edition of the series continues the analysis of employer expectations to ~~provide new insights on how~~ technology trends will shape the

- **The largest job creation and destruction effects come from environmental, technology and economic trends.**

  Among the macrotrends listed, businesses predict the strongest net job-creation effect to be driven by investments that facilitate the green transition of businesses, the broader application of ESG standards and supply chains becoming more localized, albeit with job growth offset by partial job displacement in each case.

- **Within technology adoption, big data, cloud computing and AI feature highly on likelihood of adoption.**

  More than 75% of companies are looking to adopt these technologies in the next five years. The data also shows the impact of the digitalization of commerce and trade. Digital platforms and apps are the technologies most likely to be adopted by the organizations surveyed, with 86% of companies expecting to incorporate them into their operations in the next five years. E-commerce and digital trade are expected to be adopted by 75% of businesses. The second-ranked technology encompasses education and workforce technologies, with 81% of companies looking to adopt these technologies by 2027. The adoption of robots, power storage technology and distributed ledger technologies rank lower on the list.

- **The combination of macrotrends and technology adoption will drive specific areas of job growth and decline:**

  The fastest-growing roles relative to their size today are driven by technology, digitalization and sustainability. The majority of the fastest growing roles are technology-related roles. AI and Machine Learning Specialists top the list of fast-growing jobs, followed by Sustainability Specialists, Business Intelligence Analysts and Information Security Analysts. Renewable Energy Engineers, and Solar Energy Installation and System Engineers are relatively fast-growing roles, as economies shift towards renewable energy.

  The fastest-declining roles relative to their size today are driven by technology and digitalization. The majority of fastest declining roles are clerical or secretarial roles, with Bank Tellers and Related Clerks, Postal Service Clerks, Cashiers and Ticket Clerks, and Data Entry Clerks expected to decline fastest.
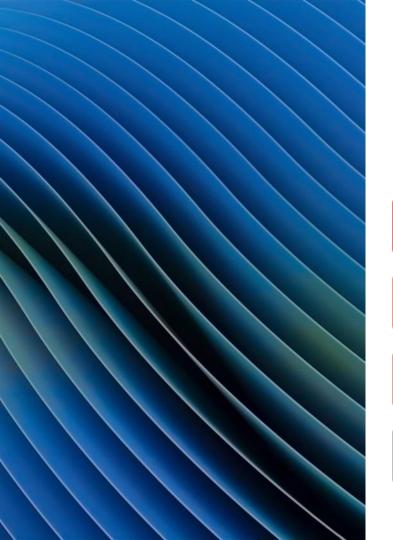
Our Mission

PEPPERDINE | GRAZIADIO
BUSINESS SCHOOL

Inspired by our Christian values, we seek to:

Promote transformational learning,
Create applied knowledge, and
Equip our students to become Best *for* the World business leaders and entrepreneurs.

Your Program

- The MS in Business Analytics program prepares you to use data to anticipate customer needs and discover patterns that solve business challenges.

- Two disciplines
    - Decision Sciences
    - Information Systems/Technology Management.

- Focus on real-world business scenarios

- In addition to teaching you technical and analytical skills, the program provides leadership and management training so that you can effectively communicate your findings in a compelling way.

BSCI 650 Personal and Leadership Development Workshop

- This workshop serves as an orientation to the experiential and team-based models of learning used at the Pepperdine Graziadio Business School. Students engage in exercises that enhance communication, ethical decision making, career development, and other relevant skills for interpersonal effectiveness in business.

- *Please log into your WaveNet Student Center to view your assigned workshop dates

- More detailed information about the workshop will be provided later in this presentation

Career Seminar

- This seminar connects you with business opportunities and provides you with the tools and resources to manage your career.

- The course consists of a series of sessions and assignments which will enable you to prepare for each step in your career development, from the time you enter the program to your placement at graduation.

- It provides opportunities for you to practice career development skills, learn new techniques, network effectively, and interview competitively.

| Data Analyst	Data Engineer	Data Scientist
Pre-processing and data gathering	Develop, test & maintain architectures	Responsible for developing Operational Models
Emphasis on representing data via reporting and visualization	Understand programming and its complexity	Carry out data analytics and optimization using machine learning & deep learning
Responsible for statistical analysis & data interpretation	Deploy ML & statistical models	Involved in strategic planning for data analytics
Ensures data acquisition & maintenance	Building pipelines for various ETL operations	Integrate data & perform ad-hoc analysis
Optimize Statistical Efficiency & Quality	Ensures data accuracy and flexibility	Fill in the gap between the stakeholders and customer
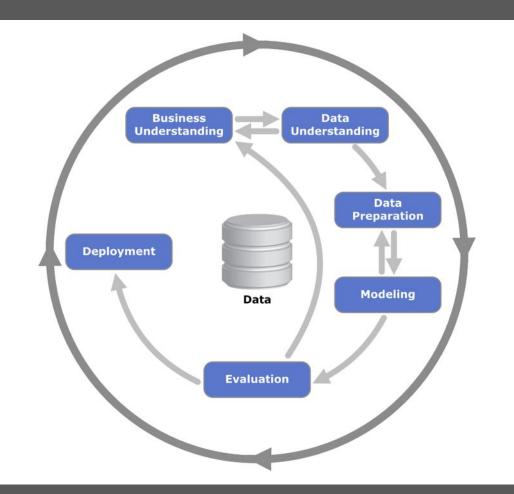
Data Analyst vs Data Engineer vs Data Scientist Roles

Data Analyst	Data Engineer	Data Scientist
Data Warehousing	Data Warehousing & ETL	Statistical & Analytical skills
Adobe & Google Analytics	Advanced programming knowledge	Data Mining
Programming knowledge	Hadoop-based Analytics	Machine Learning & Deep learning principles
Scripting & Statistical skills	In-depth knowledge of SQL/ database	In-depth programming knowledge (SAS/R/ Python coding)
Reporting & data visualization	Data architecture & pipelining	Hadoop-based analytics
SQL/ database knowledge	Machine learning concept knowledge	Data optimization
Spread-Sheet knowledge	Scripting, reporting & data visualization	Decision making and soft skills

Data Analyst vs Data Engineer vs Data Scientist Skill Sets

Business Understanding

Data Understanding

Data Preparation

Modeling

Evaluation

Deployment

Data

DESC Core Courses - 12 Units Required

- DESC 620 Advanced Statistical Tools
- DESC 622 Optimization Modelling
- DESC 624 Predictive Analytics
- DESC 626 Simulation Modelling
- DESC 629 Communications with Data
- DESC 637 Multiple Attribute Decision Analysis

ISTM Core Courses: 12 Units Required

- ISTM 622 Social Media Analytics

- ISTM 624 Big Data Management

- ISTM 626 Applying Analytics to Achieve Business Impact

- ISTM 627 Marketing Informatics

- ISTM 631 Programming for Business Analytics

- ISTM 664 Business Process Analysis and Innovation

Two Courses I Teach
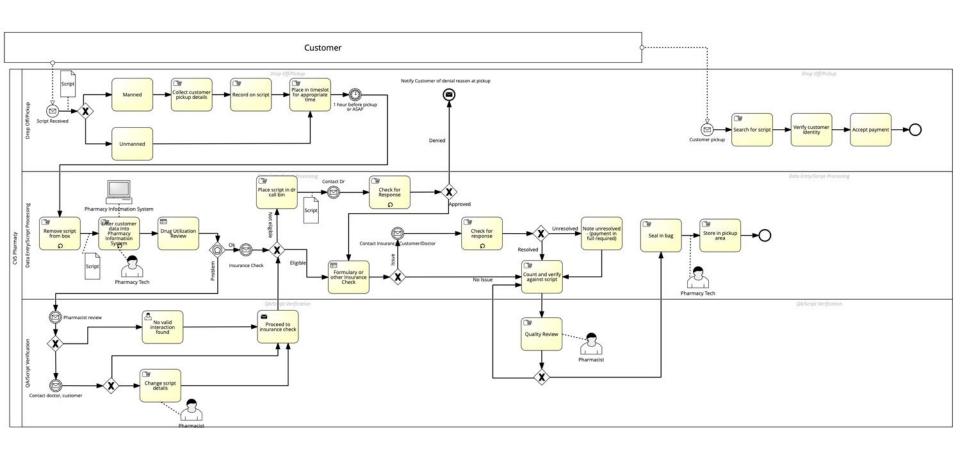
- ISTM 624 Databases and Big Data Management
  - Relational and non-relational databases
  - SQL
  - Data warehouses, data lakes
  - Intro to data mining
- ISTM 664 Business Process Analysis and Innovation
  - Business process analysis and improvement (As-Is and To-Be)
  - Process modeling skills using SAP Signavio
  - How to identify. document. model. assess. and improve core business processes.

Process Model (ISTM 664)

Electives:

6 Units Required

- DESC 621 Valuation of Real Options
- DESC 627 Supply Chain Analytics
- DESC 628 Healthcare Analytics
- DESC 636 Project Management
- ISTM 630 Information Security Data Analytics
- PGBS 698 Contemporary Issues in Business and Management
- STGY 621 Competitive Intelligence

Note: Not all electives will be offered every term

A Sampling of Tools You'll Use

- Python
- SQL
- SPSS
- Tableau
- Advanced Excel
- And others...

Top 10 Ways to Lead Yourself to Excellence

1. Read each syllabus carefully – know and understand what is expected of you
2. Attend each class session prepared to contribute to the discussion, speak up, & stay focused
3. Aim high – do the most rather than the minimum
4. Conduct yourself with the highest level of honesty, integrity, and professionalism
5. Write well - if you need support, check out our PGBS writing resources
6. Be the team member everyone wants on their team
7. Actively seek out new teammates with different perspectives when possible – diversity + inclusion
8. Help your classmates become better leaders through honest, constructive feedback
9. Work together and help each other. You are a cohort – you are not fully successful unless ALL of you succeed
10. Stay strong to the end - graduation is coming!

Looking forward to seeing you on campus soon!

Q & A

Closing

Dr. Erik Krogh
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