Doran (Ranny) M. Maurer

ranny.maurer@uah.edu

Overview

- Master's Degree in Business Analytics with a 4.0 GPA
- Proficient in numerous software packages including R, SQL, Simio, Minitab, Proprietary MDA Integrated Financial Cost Model (IFCM), Microsoft Office: Excel, Word, PowerPoint, Access, Publisher
- Active Secret Clearance, U.S. Citizenship
- Exceptional analytical and problem-solving skills

Experience

Operations Research Analyst   09/2018-present
Teledyne Brown Engineering

- Serve as primary developer for Simio-based model of high resolution patient care model of surgical medical facility. Oversee data development, develop algorithms, implement in Simio.
- Lead project to update mortality models for medical logistical planning tool using both available empirical data and estimation from subject matter experts
- Design and develop spreadsheet medical supply estimation tool for customer starting from medical network simulation model output
- Automate software simulation and data testing to allow time-consuming tests to be run more frequently and with more thorough coverage, with results displayed in a dynamic report
- Design and script algorithm tests to ensure that software logic is implemented as intended
- Rebuild tree-view selection feature of customer's VBA model prototype for compatibility on end-user's network
- Support government customer by conducting on-site and virtual customer training in software tools and new features
- Develop material and conduct internal training for TBE team of software test engineers and analysts in SQL with a focus on our databases
- Develop R-shiny data collection app to collect and dynamically display subject matter expert data
- Conduct literature review of real-world results and compare to model output; examine the impact of data changes on the model output
- Analyze and restructure data for use in new software feature for casualty stratification
- Collaborate with development team on design and implementation of casualty stratification and en route hospitalization features
- Support the design and development of Medical Planner's Toolkit and Joint Medical Planning tool, accredited modeling and simulation software tools for Department of Defense medical planners
- Co-chair the Working Group for Health, Service Support, and Casualty Estimation, 89th (2021) and 90th (2022) Military Operations Research Society Symposium. Selected as incoming chair.

Part-time Lecturer   01/2018-present
University of Alabama in Huntsville, College of Business Administration
Teach Business Statistics II (MSC 288) to undergraduate students.

Cost Analyst   11/2017-08/2018
BCF Solutions, Inc. supporting the Missile Defense Agency

- Developed well-documented Independent Government Cost Estimates totaling over $5 billion for numerous efforts in all stages from the extension of current efforts to proposed

future projects, including software development, systems engineering infrastructure, and hardware procurement in support of mission-critical contract actions

- Ran and analyzed Interceptor Procurement What-If drills based on learning curve regression model with synergy and production rate considerations to provide insight into quantity vs. Average Unit Cost tradeoffs
- Modeled cost and risk distributions in Excel and the Integrated Financial Cost Model (IFCM) using methodologies including analogy, parametric, bottoms-up, and expert opinion
- Provided cost projections to support the FY20 Budget process for Systems Engineering and Program Management divisions
- Analyzed Earned Value data to create cost estimating relationships and apply to predict future costs
- Developed over 20 cost estimates totaling over $65 million for Systems Engineering and Program Management divisions in support of the FY19 MDA Intra-agency Acquisition Review (IAR) process
- Maintained program cost model for Systems Engineering and Program Management divisions, including preparation and documentation for agency-wide Cost and Parametric Analysis Directorate (CP) Cost Review to support the BMDS Accountability Report (BAR) Resource Baseline
- Supported the Joint Emergent Operational Need (JEON) Resource Baseline effort by coordinating with other program offices and providing top-level program estimates
- Assumed responsibilities of senior team member who had an extended absence, providing continuity in completion of routine and walk-on tasks
- Supported the government customer by forming strong working relationships with Subject Matter Experts (SMEs), Management, and Budget personnel, which enhances the sharing of knowledge, the quality of work, and morale

- Peer Reviews of Cost and Parametric Analysis Directorate (CP) products to include briefs, Independent Government Cost Estimates, Joint Cost Estimates, BMDS Accountability Reports (BAR), Director's Baseline Review (DBR) Charts
- Responsibilities also included Model Documentation Book Boss, responsible for annual update of Cost Analysis Requirements Description (CARD), support the publication and updates to the 1-N budget document that ties estimates and budgets together for program use, perform efficient internal evaluations of and updates to IFCM cost model for Program Management and Missile divisions, and provide backup and surge support for Flight Test and Ground Test divisions

Graduate Teaching Assistant   **06/2016-05/2017**

University of Alabama in Huntsville, College of Business Administration

- Designed and assisted with the administration of online courses in Canvas Learning Management System
- Worked with undergraduate and graduate students one-on-one on writing and presentation skills
- Collected and analyze course data for faculty members
- Collected data for faculty research projects
- Assisted in teaching and administering courses

Translator and Editor   **01/2000-06/2016**

Self-employed

- Translated technical, scientific, legal and personal documents from German to English, in particular patent documents with a specialization in the field of chemistry

- Proofread English translations of technical documents from various foreign languages, in particular patent documents
- Collected and analyzed data on work speeds and cost relative to subject matter and team composition to facilitate planning and meeting of tight deadlines, even same day turnarounds
- Developed training presentation on patent translation editing for staff at Foreign Language Services, Inc. and other freelance editors

Graduate Teaching Assistant   08/1999-12/1999
University of Alabama in Huntsville, Department of Chemistry

- Taught a freshman-level chemistry lab
- Assisted undergraduate chemistry students in the tutoring center

Translator/Editor   09/1997-08/1999
Foreign Language Services, Inc., Huntsville, AL

- Translated technical and non-technical documents from German to English
- Edited and proofed translated documents in all languages for quality
- Taught beginning German in a one-on-one setting
- Designed and programmed interactive company website in html
- Developed project database with a simple user interface in Microsoft Access which was used company-wide to manage translation work and collect accurate data

Presentations

90th Military Operations Research Society Symposium   06/2022
- The Medical Resource Capability and Logistics (MRCL) Model: A High-Resolution Model of Patient Care on a Role 2E Afloat MTF

89th Military Operations Research Society Symposium   06/2021
- R Shiny: A Beginner's Introduction and Application for Mortality Estimate Collection

88th Military Operations Research Society Symposium   06/2020
- Casualty Stratification by MOS and Paygrade in the Medical Planners' Toolkit

Education

University of Alabama in Huntsville   05/2017
Master of Science in Management Science-Business Analytics, GPA 4.0/4.0
- Program includes study in quantitative methods; data mining and data analysis using SQL and R, including data cleaning and predictive analytics; data visualization; business intelligence and analytics; operations management; decision modeling including linear, binary and non-linear programming and decision trees; simulation modeling; design and analysis of statistical experiments; financial accounting, and a practicum.
- 2017 Graduate student recipient of the UAH College of Business Impact Award for Outstanding Contributions beyond the Classroom

University of Alabama in Huntsville   1998-1999
Graduate work in Chemistry, GPA 4.0/4.0

New York University School of Continuing Education   Spring 1998
German to English Legal Translation Course

University of Tennessee, Knoxville   05/1997
Bachelor of Science Degree
Double Major in Chemistry and German, GPA 3.43/4.0

Universität Trier, Germany   Spring 1996

International Student Exchange Program

Technical Skills	SQL, R, Simio, Tableau, Python, Minitab, Costat in ACEIT, data visualization Microsoft Office: Excel, Word, PowerPoint, Access, Publisher Proprietary Custom MDA Cost Model (Integrated Financial Cost Model (IFCM))
Languages	German: fluent (reading); proficient (speaking, writing) French: intermediate (reading); basic (speaking, writing) Certified in using the German Language for business purposes, by the American Association of Teachers of German

Volunteer Activities

Founder and Faculty Liaison, UAH Business Analytics Club

Personnel Committee member for Randolph School's annual Under the Christmas Tree fundraising event, 2015-2019: coordinated volunteers for the five-day long event.

Volunteer judge for Milestones Speech and Debate Club, 2013-2018

Dive team representative for Whitesburg pool 2014-2015

Directed Excalibur Christian School Spelling Bee, 2009-2014.

Science Olympiad team leader for Excalibur Christian School elementary division, 2012-2014

Taught high school chemistry, including laboratory experiments, and elementary school math for home school co-op at Morningside Baptist Church, 2012-2013.

Volunteer leader with American Heritage Girls troop AL 3110 2009-2013

Board Member/Discussion Group Coordinator for local chapter of MOPS International at Southside Baptist Church, 2004-2007