VLAD AMBARTSOUMIAN, PHD

CONTACT INFO

VGMBRTSM@MEMPHIS.EDU

901-383-0612 (CELL)

SKILLS:
TEACHING/COURSE DESIGN
RESEARCH: DESIGN SCI./BIG DATA
SQL, SAS
INTEROFFICE COMMUNICATION
INTERNATIONAL PROJECTS

OBJECTIVE

To find a position of an Assistant Professor in Information Systems

REFERENCES

Written and verbal references available upon request.

HIGHLIGHTS

VISITING ASSISTANT PROFESSOR

Teaching MIS courses including Analytics, RDBMS and Global IT; conducting research in the areas of Design Science and Big Data, performing service duties for the Department.

Also taught A+ and Cisco Networking courses at ASU – Midsouth

SR. MECHANICAL ENGINEER

Worked for several Semiconductor and circuit board equipment vendors to high technology leaders such as Intel, Motorola and Seagate. Gained experience with international projects, instrumentation/sensor data analysis, 3D CAD/CAM/CAE, ultrapure materials and electro-chemicals.

INTERESTS/HOBBIES

Music and Musicological data analysis. Art and languages. Business history.

EDUCATION

PHD/2016
University of Memphis

INTERNATIONAL MBA/2009
University of Memphis

MSME/1987
Kharkiv Polytechnic University

VOLUNTEER EXPERIENCE

Sister Cities International. Cincinnati, OH
Soup Kitchen/First Methodist Church. Tempe, AZ
Rotary Club of Chandler, AZ

EDUCATION IN ENGINERING

Prior to receiving my Master's degree in Mechanical Engineering from Kharkiv State Polytechnic University in Kharkiv, Ukraine in 1987, I had a chance to explore several areas of knowledge, namely Music, Art and Physics by attending evening classes at the Music and Art schools as well as at the Department of Physics at Kharkiv State University while attending Middle and High schools.

My home town of Kharkiv had almost a million and a half residents and was home to numerous heavy and defense industry enterprises such as aircraft, tanks and tractors, which influenced my preferences for education and career planning.

I intended to pursue a career in Industrial Car Body Design, but was also interested in aircraft, railroad and space technologies. I studied Mechanical Engineering at the Department of Transportation Engineering at Kharkiv State Polytechnic University. I also developed an interest in the English language at that time and defended my Master's thesis in English, which was encouraged by the Department.

Starting in 1987, I worked as a Mechanical Design Engineer at a small custom design house in Kharkiv, which was later acquired by a large engine piston maker AVTRAMAT. It was a special machine design outlet, which specialized in custom design of special vehicles for car, tractor and agricultural machinery makers. The work on one such project allowed me to earn a patent in 1991.

Also in 1987, I started studying Linguistics at Khrakiv State University's Department of Foreign Languages by entering their six-year correspondence degree. I majored in English and minored in French, which proved to be a very important skill at the time of the breakup of the USSR in 1991, which allowed me to earn more money as a translator than as an engineer.

In 1992 I applied for a camp counselor job at YMCA's Riga, Latvia, office and received an offer to work at their Hastings Lake Summer camp in Lake Villa, IL. Later I joined my then spouse in Dayton, OH; she was starting her Master of Arts in Religious Communication program at the United Theological Seminary.

WORK IN INDUSTRY

In the US, I worked in the restaurant industry until 1994, when I was able to return to the technical field and use my Engineering education to earn a living. From 1994 until 2006 I worked for several companies in the Printed Circuit Board and Semiconductor industries in Ohio, Arizona and California during an important period of the Mechanical Engineering profession's switch to 3D modeling and Computer Aided Engineering.

These companies made highly custom process machinery for leading chip and hard disk makers such as Intel, Motorola, Seagate, TSMC, etc., but they also operate in a fast-paced volatile market, and follow the cycle of the so-called Moore's law. Every time the customers, such as Intel, close one or more facilities for retooling, they lay off people and sometimes shut down permanently such as Tokyo Electron's (TEL) Eclipse division, where I worked in 2003.

The industries mentioned above are among those which are regarded as leaders in high technology, which rely on the use of ultrapure metals and plastics along with a number of hazardous electro-chemicals, and require a lot of data generating sensors (instrumentation) for process control.

My work there included design of experiments, collecting and analyzing the sensor data, writing technical papers and manufacturing floor instructions, user manuals and performing calculations with in several software applications, such as MathCAD and Excel.

I became interested in research and started to seek employment in R&D departments. My last three engineering positions were in R&D, but it was not exactly the depth of research I was looking for. Some sustaining projects were directed to R&D, although that exposed me to the new reality of Project Management and interdisciplinary work.

Some of the most valuable experience I gained while working for SEZ America, where I started working in 2001. I worked on a project in Villach, Austria where I was able to observe the differences and similarities between the engineering cultures in the USA and Austria, and, of course, the former USSR.

The issue of engineering databases became the subject of many discussions in the trade literature of the time. In 2001 I started working with Autodesk Vault and Pro-Engineer Intralink (Pro/INTRALINK).

By that time, I had developed an interest in analysis of the ERP systems used by employers, who seemed to always have problems with them, especially when it came to connecting them to the engineering documentation vaults.

Coates ASI (later Eidshcun ASI) used Growth Power on HP 1300 and Pervasive on Windows NT, Kinetics Chempure used Oracle and SEZ America used SAP and started a project to integrate it with SmarTeam. Tokyo Electron used Baan and Nor-Cal used SYMIX 4.0 database.

In 2003 I decided to earn a PhD in Mechanical Engineering with concentration on CAD at Arizona State University, but had to put it on hold because of the start of the divorce procedure.

In 2004 I started working at Nor-Cal Product's R&D facility in San-Diego, CA while the family lived in Chandler, AZ.

In 2005 I became a US citizen.

EDUCATION IN BUSINESS

After we moved to Memphis in 2006, I first entered the International MBA program at the University of Memphis in 2007, and then decided to broaden my interest from engineering databases to business databases.

In 2009 I started my PhD program while working as a Marketing intern at Kele, Inc in Bartlett, TN and later as an Accounting intern at TruckPro in Cordova, TN.

Both companies had active websites, but Kele was the one which heavily dependent on its Web sales. There I learned how a company's Web catalog is designed and maintained through the use of a content management database called Ektron and how important web taxonomies are for this process.

There, I also gained experience with Microsoft Dynamics ERP system as well as learned about an econometric analysis based on an index rarely, if ever, mentioned in Business schools, which is the Architecture Billings Index (ABI), an economic indicator for nonresidential construction activity, with a lead time of approximately 9–12 months.

Kele's catalog offers multiple instrumentation sensors for building automation, many of which are supplied by the same vendors, which supply instrumentation sensors to the semiconductor industry, for example Dwyer. I was familiar with certain products in their vast catalog, while learning about other products required an investment of time, which I was happy to make.

I became familiar with Web catalog operations, a new ERP system, the Green Building movement and LEEDs (Leadership in Energy and Environmental Design) building certification.

By 2009, while working towards my International MBA degree, I earned a SAS certificate from University of Memphis' Department of Economics. That allowed me to be hired as an Accounting intern for TruckPro, a company, which specializes in spare parts for trucks and busses. My training in tractor design allowed me to quickly understand their product line, which was essential when ordering a user view of their database for my purposes from the IT department. The fields in the database made sense to me as a Mechanical Engineer, and that helped me in running queries against it from SAS.

There, I was able to compare a company, which depends on in-store sales and their POS systems with a company, which depends on online sales. Also, at TruckPro, I learned about user views, as well as the practical uses of Open Database Connectivity (ODBC) links between SQL Server, Access and SAS.

DISSERTATION

My dissertation also has a connection to the real-world IT departments. It explored the ways of clearing terminological confusion among experienced IT professionals when it came to the new Big Data products advertisements, which targeted these professionals.

Under the guidance of my dissertation committee, I used the Design Science approach to create a method for designing a taxonomy for the new terminology. The taxonomy allows the user to understand the design intent of the product vendor by comparing the taxonomic affiliation of the new term with the taxonomic affiliation of the existing term.

The method is based on the use of the Computational Linguistic tools available from Google, first of all Google N-Gram Viewer and Google Books.

Based on this work, I have written four articles for JAIS and the DATABASE, which were rejected, but I continue working on the them. I work as a reviewer for the DATABASE and other journals.
I am working on an NSF grant based on the same articles.

I have other articles in the pipeline, but these are the priority now.

WORK IN ACADEMIA

I have been teaching MIS classes since 2011, mostly Introduction to Information Systems, MIS 2749. I have also taught the Critical Thinking with Analytics course, MIS 3210 in 2016. I understand and like Statistics both as an engineer and business researcher. But I also teach the Critical Thinking part of Analytics by using the tools of Logic to build arguments for and against acceptance of statistical evidence in business analysis.

In 2015-2016 I taught A+ and Cisco Networking courses in West Memphis, AR at Arkansas State University Mid-South to High School students. It was a challenging experience, but very rewarding. Over the years I had built dozens of PC and two home networks. I kept my students busy with both theoretical part of the material and the hands-on assignments. The university did have a full Cisco lab (six racks of servers, switches and routers) with all the cabling necessary for in-class assignments.

In 2017-2023 I continued teaching MIS 2749, MIS 3210 as well as a Global Outsourcing course, Global IT courses and MIS 6672 (the Project Management course). I have a lot of design experience in both Industry and Academia, I welcome any opportunity to design a new course if the Department decides to update its course offerings.

My Department Chair can always count on me for service responsibilities such as representing the Department at Job Fairs, research workshops or university-wide events.