**OBJECTIVE**

* Provide details of experiences in roles such as:
  + business analyst, data analyst, and systems analyst
  + software implementer, software developer, and system administrator
  + project proposer, constraints manager, process measurer
  + instructional designer, software trainer, and technical documentation writer

**SKILLS**

* Customer Service (23+ years)
* Relational Databases (17+ years)
* Requirements Analysis (17+ years)
* Training/Teaching (16+ years)
* Data Analysis (16+ years)
* Project Management (15+ years)
* Statistics (15+ years)
* Software Development (8+ years)
* ERP systems (8+ years)
* R (7+ years)
* Stakeholder Management (5+ years)
* Analytics (5+ years)
* Java (4+ years)
* Python (3+ years)
* ETL (3+ years)
* Data Warehousing (3+ years)
* Machine Learning (2+ years)

**TECHNOLOGIES**

* Analytics Tools (e.g., Excel, SAP Business Objects, RapidMiner)
* Development environments (e.g. Eclipse, WebStorm, PyCharm)
* Development processes (e.g. Traceable Requirements, Testing, Validating, Verifying)
* Programming and declarative languages (e.g. Java, Python, R, SQL, XML)
* Programming utilities (e.g. GitHub, Regular Expressions Testers)
* Project management (e.g. Expectations/Relationship Management, Cost Estimating)
* Software and process standards (e.g., IEEE, SEI, PMI, ISO, etc.)

**EDUCATION**

* University of Pennsylvania – Wharton – Business Analytics Certificate – Expected 2016
* University of Washington – Machine Learning Certificate – Expected 2016
* University of California, Berkeley - Big Data Certificate - Awarded Aug. 2015
* Johns Hopkins University - Data Science Certificate – Awarded May 2015
* Rensselaer Polytechnic Institute - Ph.D. Engineering Science – Awarded Dec. 2005
* Rensselaer Polytechnic Institute - M.S. Information Technology – Awarded Dec. 2004
* Binghamton University - M.S. Accounting – Awarded May 1997
* University of Missouri - B.S. Finance – Awarded Dec. 1990

**EXPERIENCE**

October 2016 through present

**Assembly Line Worker**

Ply Gem Stone

* Pouring, painting, inspecting, moving, and packing stones.

September 2016 through present

**Board Member**

East Snyder Community Garden

* Re-engineering web site to address unmet niches for learning organic gardening.

August 2016 through present

**Independent Contractor**

* Teaching programmers and scientists Python, R, and databases through third party.

September 2014 through present

**Certificate Student**

Johns Hopkins University & UC Berkeley  
Roles: Data Analyst, Software Developer, System Administrator

* Anticipated click-through rates via one-hot-encoding, hashing, and logistic regression
* Assessed the face validity of a R library function, using R
* Assured accuracy of statistical models by assessing underlying assumptions
* Balanced statistical variance and bias, using Ridge L1 regularization algorithm
* Classified documents using TF-IDF and Cosine similarity entity resolution
* Executed a 561 column crosswalk, using R
* Experienced NoSQL perspectives using MongoDB, Cassandra, AllegroGraph, etc.
* Predicted next word a blogger may type, using R
* Recommended products by filtering collaboratively, using Apache Spark MLIB
* Stored and manipulated National Health Interview Survey data by employing Oracle 11g/12c, WebLogic, OBIEE, SQL\*Plus, SQL\*Developer, SQL\*Loader, ODI, RCU, etc.
* Studied firing neurons in central nervous systems with principal components analysis
* Transformed wearable fitness tracker data, using R
* Winnowed predictive features from twenty to two, using Lasso L2 algorithm

**EXPERIENCE (continued)**

**Assistant Professor**

August 2013 through August 2014

Susquehanna University   
Selinsgrove, PA

Roles: Business Analyst, Instructional Designer, Systems Analyst, Software Trainer  
  
Summary: Taught students how to understand business problems and identify candidate solutions.

Details:

* Challenged students to analyze an unsolved problem and design a software solution
* Coached students as they created TO BE forms, TO BE reports, and TO BE navigation
* Demarcated students' activities using project drivers, constraints, issues, tasks, risks
* Developed curriculum for and taught 60 students
* Documented students' business use cases in AS IS processes and AS IS data stores
* Enriched students' activities as they designed TO BE processes, TO BE data stores
* Framed students' software requirements in their rationales, priorities, and measures
* Grounded students' work breakdown, schedule, and budget in requirements
* Guaranteed students' requirements could be traced through the SDLC
* Wrote and published one manuscript

**Visiting Assistant Professor**

August 2008 to August 2013

University of Pittsburgh

Pittsburgh, PA

Roles: Business Analyst, Data Analyst, Software Developer, Instructional Designer, Project Manager, Software Trainer, Systems Analyst, Systems Administrator

Summary: Managed all aspects of multiple technology training programs. Created and improved SAP solution. Taught students project management and data analysis.

Details:

* Created analytics experiences in SAP, SQL, RapidMiner
* Developed curriculum for and taught 1925 students
* Directed $23,000, reduced risks, and integrated 7 stakeholders
* Guided $5,200, led 1000+ students, and addressed 100+ needs
* Managed $101,491, risks, 10 staff, and 100+ requirements
* Sold four projects to National Science Foundation and the University of Pittsburgh
* Used $20,000, with 10+ stakeholders, realizing 100+ needs
* Wrote and published seven manuscripts and four proposals

**EXPERIENCE (continued)**

**Assistant Professor**

August 2005 to August 2008

Marist College

Poughkeepsie, NY

Roles: Business Analyst, Data Analyst, Instructional Designer, Project Manager, Systems Analyst, Software Trainer

Summary: Co-managed corporate and research software projects.

Details:

* Assured software benefit using IEEE Standards
* Developed curriculum for and taught 500students
* Designed solution with UML, ERD and DFD diagrams
* Documented needs fulfillment by teaching Rational Rose Software
* Sold and managed several software projects to NXP Semiconductors and IBM
* Sold $90,000 software project to National Science Foundation
* Wrote and published one manuscript and two proposals

**Clinical Assistant Professor**

January 2001 to July 2005

Rensselaer Polytechnic Institute

Troy, NY

Roles: Business Systems Analyst, Data Analyst, Instructional Designer, Software Developer, Software Trainer, Project Manager

Summary: Co-managed software projects at corporations and separately built esoteric software.  
  
Details:

* Built software that simulated decision making, as software developer
* Constructed web application that supported decision making, as software developer
* Developed curriculum for and taught 520 students
* Scoped and structured problems and needs using IEEE Standards
* Sold and managed software projects at GE division and MapInfo
* Wrote and published two manuscripts

**EXPERIENCE (continued)**

**President, Co-founder**

January 1998 to December 2000

Achaean Technology

Watervliet, NY

Roles: Project Manager, Sales Lead

Summary: Prototyped and marketed enterprise software for agencies providing services to the intellectually disabled.

Details:

* Motivated 10+ employees as they built, provided, and maintained application
* Sold enterprise software concept to 10+ executives and middle managers

**Systems Analyst**

September 1997 to December 2000

Rensselaer Polytechnic Institute

Troy, NY

Role: Business Systems Analyst

Summary: Performed ETL, module testing, and data warehouse development.

Details:

* Built a proof-of-concept data warehouse that successfully justified project funding
* Collaborated with business process owners, built crosswalk, and requirements
* Constructed several reporting applications
* Co-transformed and co-loaded 1.4 million records from mainframe to Oracle 7
* Created indexes making data access 55 times faster than in production environment
* Employed Informatica, scripts, PL/SQL, Oracle, Oracle Forms, SQL\*Plus, Brio
* Generated requirements and user documentation for the ERP system web interface
* Replicated production environment in data warehouse and wrote update scripts

**EXPERIENCE (continued)**

**Administrative Accountant**

May 1991 to May 1995

IBM

Binghamton, NY

Role: Accounts Payable Clerk

* Led team that delivered $3 billion annually to suppliers and governments

**Radio Operator (31 Kilo)**  
August 1985 to August 1987

US Army

Fort Huachuca, AZ

Role: Chauffeur

* Trained as forward observer radio operator
* Chauffeured lieutenant colonel, major, and command sergeant major
* Army Service Medal
* Honorable Discharge

**REFERENCES**

* See next page

**OTHER EXPERIENCE**

Volunteer Board Member for two non-profit corporations

Volunteer Mentor for First Year Students at one university

Volunteer Mentor for Students at one university

Volunteer Student Organizations Faculty Sponsor at one university

Volunteer iPad / Real-time Access / Personal Medical Records Tutor at one medical center

Volunteer Algebra Tutor for one non-profit corporation

Volunteer Associate Editor for two journals and two conferences

Volunteer Reviewer for many journals and many conferences

Total Quality Management Researcher at one university

Customer Service Representative for one corporation

Manufacturing Assembly Line Worker for two corporations

Retail Clerk for two retail chains

Livestock Farmer for one entrepreneurial venture

**REFERENCES**

DR. BRIAN S. BUTLER

Professor and Dean of the College of Information Studies

University of Maryland

301-405-2033, [bsbutler@umd.edu](mailto:bsbutler@umd.edu)

Brian was my supervisor at the University of Pittsburgh.

DR. WILLIAM E. HEFLEY

Clinical Professor of Information Systems in the Naveen Jindal School of Management

The University of Texas at Dallas

972-883-5006, [William.Hefley@utdallas.edu](mailto:William.Hefley@utdallas.edu)

Bill was a senior colleague of mine at the University of Pittsburgh.

MS. SHARON L. KUNKEL

Registrar at the Office of the Registrar

Rensselaer Polytechnic Institute

518-276-6028, [kunkes@rpi.edu](mailto:kunkes@rpi.edu)

Sharon was my “dotted-line” supervisor and customer at Rensselaer.

DR. CHARLEY TICHENOR

Former staff to Chief Information Officer at the Internal Revenue Service

Lieutenant Colonel, Retired, US ARMY RESERVE

Assistant Professor, Marymount University

703-901-3033, [Charley\_tichenor@hotmail.com](mailto:Charley_tichenor@hotmail.com)

Charley was a customer of mine at the IRS.

DR. WILLIAM A. WALLACE

Yamada Corporation Professor of Industrial and Systems Engineering

Professor of Civil and Environmental Engineering

Professor of Cognitive Sciences

518-276-6854, [wallaw@rpi.edu](mailto:wallaw@rpi.edu)

Al has been my teacher, mentor, patron, colleague, and friend.