

My portfolio is available at <https://robbinsr.squarespace.com> .

## CONTACT INFORMATION

570-884-3647

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## EXPERIENCE

### Building technical skills and searching for employment

Selinsgrove, PA – September 2014 to present

- o Used PySpark, for example, for principal components analysis of firing neurons
- o Used Lasso L2 regularization, for example, to winnow features from twenty to two
- o Used Ridge L1 regularization, for example, to balance variance and bias
- o Used Stanford Protégé and TopBraid Composer to build an ontology of standard English
- o Used AllegroGraph to store and link objects according to standard English ontology
- o Used grid search, for example, to predict song release year based on audio features
- o Used one-hot-encoding, hashing, and logistic regression to predict click-through rates
- o Used TF-IDF and Cosine similarity to classify documents based on entity resolution
- o Used MLlib and collaborative filtering to make product recommendations
- o Configured, and used Oracle 11g/12c, WebLogic, SQL\*Plus, SQL Developer, SQL Loader
- o Used Python, for example, to validate and transform 48,585 records before Oracle load
- o Used R, for example, to run and document a 561 column crosswalk across 10,300 records
- o Learned and used Ubuntu Linux to reacquaint myself with Unix
- o Learned and used JavaScript, CSS3, and HTML5 to build professional portfolio
- o Learned and used MongoDB, Cassandra, and GraphDB to begin understanding NoSQL
- o Learned and used Amazon Web Services EC2 and S3 to acquaint myself with cloud services

### Assistant Professor at Susquehanna University

Selinsgrove, PA - August 2013 to August 2014

- o Taught course that focused on analysis and design portions of SDLC to business students
- o Taught planning concepts such as drivers, constraints, issues, tasks, risks, and costs
- o Taught students how to document requirement traceability through SDLC activities
- o Reinforced importance of driving work breakdown, schedule, and budget via SDLC
- o Students developed requirements as well as their rationale, priorities, and measures
- o Students documented AS IS processes and AS IS data stores for business event use cases
- o Students designed TO BE processes, TO BE data stores for business event use cases
- o Students built TO BE prototype forms, TO BE reports, and TO BE navigation schemes

## EXPERIENCE (continued)

### Visiting Assistant Professor at University of Pittsburgh

Pittsburgh, PA - August 2008 to August 2013

- o In project manager role, across four projects, managed:
    - \$101,491, 3-year schedule, scope risks, 10 staff, 200+ students, and 100+ requirements
    - \$23,000, short schedules, technology risks, and collaborated with 7 stakeholders
    - \$5,200, short schedules, customer risks, 1000+ students, and 100+ requirements
    - \$20,000, 2-year schedule, 100+ requirements, and collaborated with 10+ stakeholders
  - o In developer role, used, for example, MySQL, Tomcat, Eclipse, Java EE, Java Server Pages
  - o In teaching role, taught SAP, SQL, RapidMiner, and data analysis
- In teaching role, taught project scope, risk, time, cost, and quality management

### Assistant Professor at Marist College

Poughkeepsie, NY - August 2005 to August 2008

- o In customer liaison role, led software projects at NXP Semiconductors and IBM
- o In developer role, tools used included ASP.Net, JavaScript, DB2, and SQL Server
- o In project manager role, used IEEE Standards for example, for testing and configuration
- o In designer role, used UML Use Case, Activity, Class, Sequence, State diagrams
- o In designer role, used entity-relationship (ERD) and data-flow (DFD) diagrams
- o In teaching role, helped students learn Microsoft Visio and the Rational Rose Suite

### Clinical Assistant Professor at Rensselaer Polytechnic Institute

Troy, NY - January 2001 to July 2005

- o In customer liaison role, led software projects at GE Specialty Materials and MapInfo
- o In developer role, technologies included SAP, VBScript, IIS, and SQL Server
- o In project manager role, used IEEE Standards for example, for scoping and requirements
- o In developer role, developed and tested web application to support decision making
- o In developer role, developed and tested Java program to simulate decision making
- o In teaching role, helped students learn Microsoft Access, Excel, and PowerPoint

### Project Manager at Achaean Technology

Watervliet, NY - January 1998 to December 2000

- o Developed prototype web app software for social service agencies
- o Designed, built, and maintained SQL Server database and VBScript forms

## EXPERIENCE (continued)

### Business Systems Analyst at Rensselaer Polytechnic Institute

Troy, NY – September 1997 to December 2000

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

### Accounting Clerk at IBM

Binghamton, NY – May 1991 to May 1995

- o Led team that delivered \$3 billion annually to suppliers and governments

### Radio Operator in US Army

Fort Huachuca, AZ – August 1985 to August 1987

- o Chauffeured lieutenant colonel, major, and command sergeant major
- o Honorable Discharge

## SKILLS

My skills fall into the following very high level categories:

- o Databases (e.g. Oracle, MySQL, SQL Server)
- o Development environments (e.g. Eclipse, WebStorm, PyCharm)
- o Development processes (e.g. Traceable Requirements, Testing, Validating, Verifying)
- o Graphically-oriented analytics toolboxes (e.g. RapidMiner, SAP Crystal Reports)
- o Programming and Declarative Languages (e.g. Java, Python, R, SQL, XML)
- o Programming fundamentals (e.g. Lambda Expressions, Data Structures)
- o Programming utilities (e.g. GitHub, Maven)
- o Programming resources (e.g., Stack Overflow, CodePen, Regex Testers)
- o Project management (e.g. Expectations/Relationship Management, Cost Estimating)
- o Python packages (e.g. PySpark, Pandas, GraphLab, BeautifulSoup)
- o R libraries (e.g. caret, ggplot2, ShinyApps, knitr, lattice, rmarkdown)
- o Training approaches and tools (e.g. project-based, problem-based)

## EDUCATION

- o University of California, Berkeley - Certificate - Big Data August 2015
- o Johns Hopkins University - Certificate - Data Science May 2015
- o Rensselaer Polytechnic Institute - Ph.D. Engineering Science December 2005
- o Rensselaer Polytechnic Institute - M.S. Information Technology December 2004
- o Binghamton University - M.S. Accounting May 1997
- o University of Missouri - B.S. Finance December 1990

## EDUCATION (in process)

- o University of Pennsylvania - Certificate- Business Analytics
- o University of Washington – Certificate – Machine Learning
- o University of Washington – Certificate – Data Science at Scale
- o University of California, San Diego – Certificate – Big Data

## REFERENCES

- o DR. BRIAN S. BUTLER
  - o Professor and Dean of the College of Information Studies
  - o University of Maryland
  - o 301-405-2033
  - o [bsbutler@umd.edu](mailto:bsbutler@umd.edu)
  - o Brian was my supervisor at the University of Pittsburgh.
- o DR. WILLIAM E. HEFLEY
  - o Clinical Professor of Information Systems
  - o Naveen Jindal School of Management
  - o The University of Texas at Dallas
  - o 972-883-5006
  - o [William.Hefley@utdallas.edu](mailto:William.Hefley@utdallas.edu)
  - o Bill was a senior colleague of mine at the University of Pittsburgh.
- o MS. SHARON L. KUNKEL
  - o Registrar
  - o Office of the Registrar
  - o Rensselaer Polytechnic Institute
  - o 518-276-6028
  - o [kunkes@rpi.edu](mailto:kunkes@rpi.edu)
  - o Sharon was my “dotted-line” supervisor and customer at Rensselaer.

**REFERENCES (continued)**

- o DR. CHARLEY TICHENOR
  - o Former staff to Internal Revenue Service CIO
  - o Lieutenant Colonel, Retired, US ARMY RESERVE
  - o Assistant Professor, Marymount University
  - o 703-901-3033
  - o [Charley\\_tichenor@hotmail.com](mailto:Charley_tichenor@hotmail.com)
  - o Charley was a customer of mine at the IRS.
- o DR. WILLIAM A. WALLACE
  - o Yamada Corporation Professor
  - o Professor of Industrial and Systems Engineering
  - o Professor of Civil and Environmental Engineering
  - o Professor of Cognitive Sciences
  - o Member, Faculty of Information Technology
  - o 518-276-6854
  - o [wallaw@rpi.edu](mailto:wallaw@rpi.edu)
  - o Al has been my teacher, mentor, patron, colleague, and friend.