Russ Robbins
Skills – Detailed List
http://robbinsr.github.io
Contact Me

Analytics Fundamentals

- Relational Algebra (basic)
- Structured Query Language (SQL) (proficient)
- Multidimensional Data Modeling (proficient)
- Online Analytical Processing (proficient)
- Extraction, Transformation, Load (proficient)
- Linear Algebra-Matrix/Vector Operations (basic)
- Extensible Markup Language (basic)
- JavaScript Object Notation (basic)
- Comma Separated Values Files (proficient)
- Graph Theory (basic)

Databases

- Cassandra (formal training)
- Ontotext GraphDB (used)
- MongoDB (formal training)
- MySQL (used)
- Neo4j (evaluated)
- Oracle (used)
- SQL Server (used)
- Stardog (used)
- Teradata (evaluated very lightly)
- Virtuoso (evaluated)

Development Environments

- Anaconda (evaluated)
- Databricks (used)
- Eclipse (used)
- Enthought Canopy (evaluated)
- IDLE (evaluated)
- iPython interpreter (evaluated)
- iPython notebook(used)
- Komodo (evaluated)
- NetBeans (used)
- Oracle SQL Developer (used)
- Oracle Applications (used)
- Pycharm (used)
- Revolution R
- R Studio (used)

Development Environments (continued)

- Spyder (used)
- Stanford Protege (used)
- Teradata Studio Express (evaluated very lightly)
- TopBraid Composer (used)
- Visual Studio (evaluated)
- Web Storm (used)
- Wing (evaluated)
- WinPython (used)

Development Processes

- Quality (e.g., security, reliability, usability) Assurance (basic)
- User Interface Design Principles (proficient)
- Functional Requirements (expert)
- Listening (proficient, but one can always work on this…)
- System Requirements (basic)
- Nonfunctional Requirements (proficient)
- Tracing Requirements (proficient)
- Software Design Patterns (rudimentary)
- UML Graphical Modeling (expert)
- Software Testing (basic)
- IEEE Software Engineering Standards (proficient)

Drag and Drop Toolboxes

- Cognos (evaluated)
- Informatica (used)
- Oracle Business Intelligence 11g (evaluated)
- Oracle Fusion/Essbase (evaluated)
- RapidMiner (used/taught)
- SAP Business ByDesign (used/taught)
- SAP Business Objects (formal training/used)
- SAP Crystal Reports (used/taught)
- SPSS (used)
- Tableau (evaluated)
- Brio (absorbed by Hyperion then by Oracle) (used)
- Sequitur (defunct or absorbed, not sure)

Languages

- C (very, very long time ago)
- C++ (very long time ago)
- Java (basic)
- JavaScript/CSS/HTML (basic)
- JSON (basic)
- Markdown (basic)
- Pandoc (basic)
- Python (familiar)
- OWL (basic)
- R (proficient)
- RDF (basic)
- Regular Expressions (between basic and proficient)
- Spark (familiar)
- SPARQL (basic)
- SQL (proficient)
- UML (proficient)
- XML (basic)

Machine Learning Fundamentals

- Classification (basic)
- Regression (basic)
- Resampling (rudimentary)
- Model Selection (rudimentary)
- Regularization (rudimentary)
- Non-linear Models (rudimentary)
- Tree-based Methods (rudimentary)
- Support Vector Machines (rudimentary)
- Clustering (rudimentary)

Miscellaneous

- Adobe Illustrator
- Photoshop (used)
- Altova XML Spy (used)
- Apache Jena (Java API>(used)
- Apache Tomcat (Web Server)> (used)
- Bootstrap (Web Framework)> (used)
- Foundation (Web Framework)> (used)

Miscellaneous (continued)

- Google Apps (used)
- IBM Rational Software (used)
- Jack Intelligent Agents (used)
- Jadex Active Components (Java API) (used)
- Microsoft Project (used)
- Microsoft Visio (used)
- SharePoint (used)
- Access (used)
- OpenRDF Sesame (Java API)(used)
- Pellet (lightly evaluated)
- Pure (Web Framework)> (used)
- Research Cyc (lightly evaluated)
- WordNet (used)
- Verbnet (used)
- FrameNe (used)
- PropBank (used)
- LemonUBY (Vocabularies) (used)
- LSEG4 (used)
- Lexical Markup Framework
- isoCAT (Grammars) (used)
- CCAE
- Penn TreeBank
- British National Corpuses (used)
- Windows Movie Maker (used)
- Open Source or Free Alternatives (proficient)

Programming Fundamentals

- Input/Output (proficient)
- Control Flow (proficient)
- Classes (basic)
- Objects (basic)
- Functions (proficient)
- Methods (proficient)
- Dictionaries (between basic and proficient)
- Lists (between basic and proficient)
- Sets (between basic and proficient)
- Graphs (between basic and proficient)
- Iteration (proficient)
- Vectorization (rudimentary)

Programming Fundamentals (continued)

- Recursion (basic)
- Exception Handing (rudimentary)
- Lambda Expressions (basic)
- Map (basic)
- Reduce (basic)
- Closures (rudimentary)
- Search Algorithms (rudimentary)

Programming (Statistics) Toolboxes

- MATLAB (evaluated)
- Octave (used)
- Minitab (used)
- Python (used)
- R (used)
- Rattle (learned)
- Revolution R (used)
- SAS (evaluated)
- Stata (used)

Programming Utilities

- AWS Compute / Storage / Database (using)
- Heroku / Python / NodeJS (using)
- Cygwin (used)
- GitHub (using)
- JSFiddle
- CodePen (used)
- Maven (evaluated)
- Oracle Virtual Box (used)
- Putty (used)
- Regex101, RegexPal, Regexr, Pythex, (using)
- RPubs (using)
- ShinyApps (using)
- Notepad++, Sublime, EmEditor, Nano, Gedit, etc. (using)
- Ubuntu Linux (using)
- Unix (used)
- VMWare (evaluated)

Project Management

- [Reference for all items in this section](#)
- Risk Management (basic)
- Quality Management (basic)
- Scope (Requirements) Management (proficient)
- Time (Schedule) Management (basic)
- Cost (Budget) Management (basic)
- Employee Management (basic)
- Vendor Management (basic)
- Customer Management (basic)
- Interface with Software Engineering (expert)

Statistics Fundamentals

- [Reference for all items in this section](#)
- Descriptive Statistics (proficient)
- Distributions (basic)
- Probability Theory (proficient)
- Bayes Theorem (basic)
- Hypothesis Testing (between basic and proficient)
- Simple & Multiple Linear Regression (proficient)
- Oneway & Multifactor ANOVA (basic)
- Logistic & Ordinal Regression (proficient)
- Binomial Test (basic)
- Chi-square Contingency Tables (basic)
- Non-parametric Alternatives (proficient)

Python Packages

- [Reference for all items in this section](#)
- Beautiful Soup (used)
- Bottle (used)
- Core NLP (evaluated)
- iPython (used)
- MatPlotLib (evaluated)
- NumPy (used)
- Pandas (used)
- PyMongo (used)
- pyR (evaluated)
- PySpark (used)
- Re (used)

Python Packages (continued)

- SciPy (used)
- NLTK (used)
- PyQt (used)

R Libraries

- Reference for all items in this section
- caret (used)
- ggplot2 (used)
- data.table (used)
- doBy (used)
- Hmisc (used)
- knitr (used)
- MASS (used)
- lattice (used)
- leaps (used)
- plyr (used)
- rCharts (used)
- regex (used)
- reshape2 (used)
- rPython (evaluated)

Training Approaches & Tools

- Project-based Learning (expert)
- Problem-based Learning (expert)
- Case Based Learning (expert)
- Collaboration and Learning (expert)
- Technology and Learning (expert)
- Learning Outcomes (proficient)
- Learning Outcomes Assessment (proficient)
- Camtasia
- Audacity
- Adobe Creative Cloud (used)
- WebEx
- GoToMeeting
- Google Hangouts (used)
- PollEverywhere
- Socrative (used)
- Screencast

Training Approaches & Tools (continued)

- YouTube (used)
- Articulate
- Captivate
- Lectora (evaluated)
- WebCT (now part of Blackboard)
- Sakai
- Blackboard
- Moodle (used)
- Simulations
- Virtual Worlds
- Augmented Reality(used)