Roderick Maclan M.S.

San Diego, CA

# Summary

* Experienced visionary in developing innovative solutions to complex problems (assets >$100BN)
* Information Architect at the fastest growing and second largest cloud company
* Experience Principal Systems Analyst/Architect who created the first intelligent medical surveillance system for the Department of Defense
* Experience in developing big-data analytics/predictive modeling solutions
* Experience in developing enterprise architecture
* Technology areas includes data storage, networking, analysis/business intelligence, reporting, web development, application development
* Strong desire to leverage technologies to create machine-reading solutions
* Proven leadership experience

# Leadership Competencies

Operational Analysis| Strategic Planning| Development | Change Management |Quality Improvement

# Software Business Operations Competencies

Product Design & Development| Infrastructure Development |Team Building | Requirements |SDLC-SCRUM

# Specialties

Customer Insights |Medical Intelligence| Business Intelligence| Data Mining/Text Mining/Web Crawling| Artificial Intelligence/Machine Learning |GIS| Epidemiology| Web Development| Clinical Information Systems| Data modeling/Architecture (Physical/Logical)| Data Visualization | Modeling & Simulation | Semantics | Pattern Recognition/Anomaly Detection-Fraud/Disease Outbreak/Crime/Vulnerabilities/Micro-targeting/Marketing/Logistical Resource Allocation

# Technical Expertise

# Technical Skills

Data Mining/Profiling: SPSS Clementine/Modeler, SAS 9.2, SAS Enterprise Miner, SAS Enterprise Guide, SAS Base, Statistica, Microsoft SSAS/SSIS/SSRS/BIDS/PowerPivot/ R/Rapidminer

DBMS: Microsoft SQL Server 2005/2008/2012, Access, MySQL, MySQL Workbench

Languages: Visual Basic, VBA, VB.NET, .NET Framework, XML/XSLT, HTML

Scripting: ASP.net, Javascript, VBScript, PHP

Web Development: WebCrawl, Web Services, BI Dashboard Development, GIS integration, Silverlight

Tools: Visual Studio 2005/2010/2012, Microsoft Project, Microsoft Visio/Office Suite, Adobe Dreamweaver, ArcGIS, IIS, Active X, JQuery, Eclipse-BIRT, Hadoop (learning), Drupal (learning), Erwin, Dojo, Google Visualization, XAMPP

SQL: Third Party controls: ComponentArt

CIS: CPOE, PACS, WMS, RIS, GIS, paper to electronic records solutions development, Medical Intelligence, Strategic Marketing through predictive modeling

# Concepts

Big Data Analytics, ITIL, SDLC SCRUM, NLP (text-mining), OOP, multi-dimensional analysis, machine-learning/neural-network, micro-targeting/anomaly detection, Business Data Communication Systems, standardization, SDLC, data warehousing, network technology infrastructure (OSI levels), SOA.

# Professional Experience

## ServiceNow- Data Scientist/Information Architect & Developer MAR 2013-Present

Hired and promoted from Customer Insights Analyst to Information Architect within first month. Developed Enterprise Data Warehouse Schema, created internal reporting system, and enabled text-mining capabilities at the fastest growing. and one of the biggest cloud companies.

## Pethe Inc. CEO AUG 2012 – MAR 2013

## Provide advanced analytics research and development consulting services on a contract basis. This is a start-up analytics firm bidding for government-funded contracts.

## Axiom Resource Management-Naval Health Research Center San Diego APR 2011-AUG 2012

Principal Systems Architect/Analyst at Medical Modeling and Simulation Dept- The position on hire was to design and build in efficiency in reporting of a distributed storage system to enable Medical Intelligence to mitigate risk of combat injuries for all US Service members. This position is vital for forensic analysis and collaborates with other intelligence communities. The following are a few examples of which were personally accomplished despite limited resources:

* Increased Reporting Efficiency by 6000% by building data warehouse from limited resources
* Increased accuracy of information capture by 325%
* Created Intelligent Medical Injury Surveillance System for the Department of Defense
* Catalyst for changing analysis performed on Relational model to one based off of star-schema
* Created first PTSD predictive project algorithms that increased predictive accuracy by 738%

## United State Navy DEC 2001-DEC 2009

US Naval Officer (ENS-LT)

* Systems Integration Steering Committee Member, Performance Improvement Officer, ISSO, HIPAA compliance/privacy officer, Systems Integration Support, Clinical Systems Support
* Deployed to Camp Delta, Guantanamo Bay, Cuba (Super Maximum Security) Detainment Camp for Behavioral Health Support.
* Clinical Research, charge nurse: Medical-Surgical, Behavioral Health, APU, Triage, Cardiac-Cath, Tele.

# Education

University of Illinois- Public Health Informatics (Enterprise)- Masters of Public Health Informatics- Awarded 2010

Data modeling, Database Administration, Surveillance Development, Information Systems, GIS, Statistics, Web Programming, Business Data and Communication Systems.

University of Texas- Bachelors of Science in Nursing. Awarded 2001

Additional Education:

Stanford University/Rice/MIT- Survey Courses- Artificial Intelligence, Machine-Learning, Probablistic Graphics, Cryptography, NLP, Python Programming

UC Berkeley – Financial Accounting

Certifications- Association for the Advancement of Automotive Medicine (AAAM) Abbreviated Injury Scale (2011)

 TNCC Trauma Nurse Care Course 2003

 Combat Casualty Care Course (C4) in San Antonio, TX (Camp Bullis) 2003

License- Registered Nurse (California)

# Analysis

Big Data Analytics, NLP (text-mining), OOP, multi-dimensional analysis, machine-learning/neural-network, micro-targeting/anomaly detection, Business Data Communication Systems, standardization, SDLC, Star/Snowflake schema, network technology infrastructure (OSI levels), web applications, reporting applications

Built PTSD Predictive screening model for the Department of Defense which effects all personnel deployed, and raised PPV from 7% to 70%. This was over 2.1 million data points with over 116 different levels.

Graduate level statistics, with documented ability to design strategic roadmaps within R&D, while also comfortable assuming more technical roles to fill in gaps.

# Research

Nursing Clinical Quality Initiative. Joyce, Fitzpatrick, PhD, MBA, RN, FAAN. Mount Sinai-NYU. NY, NY. Research Assistant. 2000

Primary Investigator- Vicarious Traumatization/Secondary PTSD in Military Medical provider/support in forward deployed area- A study of schema disruption and effects on therapeutic delivery/efficiency. 2003

Knowledge Management Repository 2-PTSD Predictive Modeling Project- Emory Fry, MD (CAPT, USN). 2012-*Currently in publication process.*

This was the first time predictive analytics was used on the Combat Trauma Registry (EMED), which was linked to 17 other sources. Developed 13 learning algorithms, which combed through 2.17M data points. Results: Decreased need to use 232 question screening to only 5-10 questions, which increased accuracy in positively predicting subsequent diagnosis of PTSD from 8% to 70%.

Security Clearance- Secret/NATO