# Robert A. Downing, II

# Objective

Business professional and Entrepreneur with significant Engineering, Product Marketing, Management and Business expertise seeking to share accumulated experience with next-generation leaders.

# Summary of skills

#### **Educational**

- Big Data
  - Big Data [& the Hadoop] Ecosystem
  - Data Mining & Machine Intelligence
  - Internet of Things
- Database
  - o Data Modeling and Implementation Techniques
  - Introduction to Relational Database
- Networking
  - Cryptography & Information Security
  - Network Analysis & Troubleshooting
- Operating Systems
  - Operating Systems [General structure: Linux/Unix/Windows]
  - Linux Systems Programming
- Programming
  - Advanced Programming for a UNIX/Linux Environment
  - UNIX/Linux Network Programming

#### **Entrepreneurial**

Founded text analysis startup: authored patents for core IP, currently active;

- A Method & System for Determining & Reflecting the Sentiment & Impact Adhering to a Brand or Reputation on the World Wide Web [filed]
- A Method & System for Synthesizing Large Amounts of Structured & Unstructured Data with the Goal of Yielding Predictive & Prescriptive Analytics in Support of Intelligent Business Decision-Making [filed]
- A Method and System for Accepting from External Sources a Designated Characteristic of a
  Location within the Internet and Deriving from said Characteristic a Measure of Importance for
  said Location with the Goal of Yielding a Discreet Quantity that can therefore be Combined with
  Other Characteristics with the Aim of Establishing Predictive and Prescriptive Analytics in
  Support of Intelligent Business Decision-Making [filed]
- A Method and System Utilizing a Hierarchical Structure of Lexicons to Establish Vernacular,
   Dialect and Slang in the Analysis of Textual Data in Order to Set Context to a User of said

System, which Vernacular, Dialect and Slang will Evolve as a Function of Usage Over Time, Providing for a Self-learning Method of Establishing a Continuity of Context in said Textual Analysis

- A Method and System for Synthesizing Large Amounts of Structured and Unstructured Data with the Goal of Yielding a Measure or Measures of Veracity or Truthfulness Adhering to Single or Multiple Atoms of Data
- A Method & System for Determining & Reflecting the Various Sentiment & Impacts Adhering to a Word or Words: According to the Inherent Sentiment of said Word or Words as Modified by Projected Impacts Accruing from Dynamically-selectable Source or Sources of Publication of said Word or Words in Determining Effectiveness & Desirability of Advertising and/or Marketing
- A Method & System for Determining & Reflecting the Return on Investment Adhering to a Word
  or Words said Word or Words in Being Used for Advertising and/or Marketing Content

Co-founder Utility Computing startup.

#### Technical

- Application of Natural Language Processing
- Application of data mining
- Relational database design and management
- Networking in both legacy and Internet Protocol protocols
- Custom programming in various languages
- Operating systems from mainframe to mobile devices

#### **Publications**

Author: Frame Relay + MPLS; Frame Relay Forum for MPLS World

A discussion of the etymologies of Frame Relay and MPLS, with reference to the integration of both mechanisms of transport for next generation networks.

Author: A comparison of basic Frame Relay and IP VPN End-User Security; Frame Relay

Forum for Auerbach Management Series

A discussion of Virtual Private Networking, from the perspectives of Frame Relay and MPLS as two similar transport technologies, each having the ability to provide security separate and distinct from that provided by the more recognized VPN approaches.

## Employment

## 2014 - Present Olivet University: Olivet Institute of Technology

#### Instructor

- IT330 Introduction to Relational Databases
- IT500 Operating Systems
- NS500 Networking
- DS500 Big Data Ecosystem
- IT600 Cryptography & Information Security
- ITEC500 Linux Internals
- ITEC230 [Online offering] Operating Systems
- ITNS999 IoT using the Arduino platform [in development]

## 2015 – 2016 – Northwestern Polytechnic University

## Adjunct Faculty

• CS457 – Data Modeling and Implementation Techniques

- CS510 Advanced UNIX/Linux Programming
- CS515 UNIX/Linux Network Programming
- CS550 Data Mining and Business Intelligence
- CS575 Network Analysis and Testing

# 2011 - Present Trendicy Company Text Analytics Startup

Chief Executive Officer Chief Technology Officer

# 2009 – 2010 PalazzoTech Social Networking Startup

**Chief Technology Officer** 

## Prior

- Blade Network Technologies Product Manager Software Programs
- IP Infusion Senior Product Manager
- Larscom Senior Product Marketing Manager
- 3Com Marketing Engineer, Business Development Manager
- Netsoft Systems Engineer, System Programmer
- IBM Product Support Representative, Systems Engineer, Regional Technical Resource