R. Kent Wills

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Objective:

Obtain a summer internship in a fast-paced, creative, high-impact environment with the ability to leverage and build both technical and leadership skills.

Skills:

- MS Coursework: Information Visualization, Algorithms, Applied Algorithms (MapReduce/Hadoop), Spatial Data Structures, Machine Learning
- Agile Development, Project Management
- Java, Python, C#/ASP.NET, C/C++, Javascript, SQL, x86 • Hadoop, PIG • Visual Studio/Eclipse • Spotfire, Gephi • Git
- LinkedIn: http://www.linkedin.com/pub/kent-wills/3b/a64/b65

Education:

Graduate: University of Maryland, expected Dec 2014
Master of Science, Computer Science
GPA: 3.79

Undergraduate: University of Pittsburgh, August 2007
Bachelor of Science and Engineering, Computer Engineering

Work History:

University of Maryland
Research Assistant

Research Assistant
College Park, MD • September 2012 - Current
Investigating new ways to protect against cyber attacks through a methodical software engineering approach and empirical analysis. (ESEM, USENIX CSET publications) (Software Engineering @ University of Maryland)

MyISquared
Co-Founder

Chief Operating Officer
Boston, MA • January 2012 - Current
MyISquared Inc. brings together retail investors and corporate partners, providing an online social platform that allows firms to magnify targeted messages directly to shareholders and potential investors. (MyISquared)

Army Research Labs
Intern

Computer Engineer
Adelphi, MD • June 2012 - August 2012
Developed a software platform to enhance the laboratory's mechanical switch testing capabilities. The platform will be validated through testing mechanical logic memory elements developed through the DARPA Nano Electro Mechanical Switch (NEMS) program, evaluating their yield, lifetime, data retention, and switching speeds. (ARL)

Director/Manager
Active Duty

US Army, CPT
Kadena Air Base, Okinawa, Japan • October 2007 - June 2012
Lead tactician and advisor on US Air Force, Navy/Marine and Japanese Air Force integration for a forward deployed Air Defense Unit. Responsible for the tactical training of over 400 Soldiers. Directly managed the health and welfare of over 45 Soldiers and their families, airspace protection for Kadena Air Base and Patriot equipment valued in excess of $47 Million. Furthermore, volunteered in the 2011 Tsunami effort to manage the recovery of Sendai Airport and 12 local schools, clearing 3,005 damaged vehicles and providing 35 pallets of water, 351 drums of kerosene, 11 convoys of supplies, 1,804 backpacks for junior high students. Additionally, directly responsible for the health and care of 192 forward deployed personnel in the Sendai region.

US Patent & Trademark Office
Intern

Patent Examiner
Alexandria, VA • June 2005 - August 2005
Examined patents in the Memory and Cache Department ART Unit 2186.

Publications:

• J. Stuckman, K. Wills, J. Purtilo, *"Evaluating Software Product Metrics with Synthetic Defect Data"*. ACM / IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM) '13. - Best Short Paper

• G. Nilson, K. Wills, J. Stuckman, J. Purtilo, *"BugBox: A Vulnerability Corpus for PHP Web Applications"*. USENIX 6th Workshop on Cybersecurity Experimentation and Test (CSET) '13.

• K. Wills, "Micro-Electromechanical System (MEMS) Automated Testing Platform". Army Research Labs Technical Manual '12.

Projects:

IndoorViz - JavaScript - D3.js, Ember.js, Kinetic.js, CoffeeScript
College Park, MD • September 2013 - Current
Front end indoor visualization software in development for MicroStrategy @ IndoorViz.

BugBox - Python
College Park, MD • September 2013 - Current
A corpus, testbed, and framework for the analysis of PHP Web Application vulnerabilities. Developed for Debian, BugBox automatically installs web applications, performs automated exploits on the applications, and collects the results through different tools.
Slides Paper Code

MeeshQuest - Java
College Park, MD • June 2012 - August 2012
A course project and Java application that builds portions of map software that mimic online mapping direction software. The application utilizes PR/PM Quadtries w/ a singleton design pattern, Dijkstra w/Fibonacci Heap, re-implementation of Java TreeMap w/ a new data structure, and B+ Tree.

Hadoop Projects - Hadoop, PIG, C++, Bash
College Park, MD • September 2012 - December 2013
Developed applications based on "pairs" and "stripe" base approach. Applications included basic counting, pointwise mutual information calculations, inverted indexing, and pagerank implementation. A final project includedthe Hadoop driven big data metrics analysis pipeline located @ PigBugs.

Development of ML Algorithms - Python
College Park, MD • September 2012 - December 2013
Decision tree, K-Nearest Neighbors, Averaged-Perceptron, Collaborative Filtering, and PCA.

DARPA Nanoelectromechanical Switch (NEMS) Testbed - C# .NET
College Park, MD • May 2013 - August 2013
This project developed over a summer internship was created to validate mechanical logic memory elements developed through the Defense Advanced Research Projects Agency (DARPA) nanoelectromechincal system (NEMS) program, evaluating their yield, lifetime, data retention, and switching speeds.

Twitter Sentiment Analysis for Stocks - C# .NET
College Park, MD • September 2012 - December 2013
Split second, bayesian predictor giving users on the website a sense of how the stock is performing based off of Twitter comments @ TWEET.

MyISquared - MVC C# .NET, Javascript (CDN, Azure Cloud)
College Park, MD • September 2012 - Current
A Joint Harvard/Maryland startup aimed at educating investors through an informative website and offering them a service to redeem financial perks.