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|  | **PROFILE** | | |
| **Vivek A Sinha** | | | **LinkedIn:** linkedin.com/in/VASinha  **Email**: Vivek.Sinha@Asu.edu  **Phone:** +1-765-426-8953  1620 E Jefferson St Apt 331, Rockville, MD 20852 |
| **CAREER OVERVIEW**   * Experienced and Motivated engineer with an advanced statistical degree and 7 years of advanced analytics experience. * Excellent communicator and program manager with a history of building cross-functional relationships to tackle business challenges. * A solid combination of background and experience in applying R, MATLAB, Tableau, SQL, Design of Experiment to solve analytical challenges in marketing, research and product development * 3+ years of experience in writing programs to process large datasets and build dynamic, closed-loop models for customer segmentation, pricing optimization, usage based interventions, fraud detection, and work queue management, defect/error-log monitoring. * Rewarded for commendable commitment and excellence in multiple organizations * An open source enthusiast with the knowledge and experience of setting up R server environment, open source BI (Spago BI) server environment. | | | |
|  | **EDUCATION** | | |
| https://tse1.mm.bing.net/th?id=HN.608023754409052200&pid=1.7 | | Master of Engineering in Quality Reliability & Statistical Engineering *Arizona State University, 2013-2014* | |
| http://tv.case.edu/athletics/images/cwru_stacked_logo_blue_no_tag.jpg | | Bachelor of Science in Biomedical Engineering *Case Western Reserve University, 2006-11* | |
|  | **CERTIFICATIONS** | | |
| https://tse1.mm.bing.net/th?id=HN.608023754409052200&pid=1.7 | | Lean Six Sigma Black Belt (Certificate) *Arizona State University, 2014* | |

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|  | | **SKILLS** | | | | |
| full, star icon  **Expert** | | | | Skill Level | **Advanced** | Skill Level |
| Big Data Analysis using R | | | | ●●●●● | Design of Experiment | ●●●●● |
| Statistical Programming (R, MATLAB, SAS) | | | | ●●●●● | Quality Management | ●●●●● |
| Tableau, QlikView, SpagoBI | | | | ●●●●● | Response Surface Analysis, Time series analysis | ●●●●🞅 |
| Senior Leadership Communication | | | | ●●●●● | Strategic Planning | ●●●●🞅 |
| Statistical Process Control | | | | ●●●●● | Reliability Engineering | ●●●●🞅 |
| Regression Analysis, Logistic, Decision Tree Modeling | | | | ●●●●● | Model Validation | ●●●●🞅 |
| Six Sigma Implementation, Project Management | | | | ●●●●● | Hadoop, RHive | ●●●🞅🞅 |
| SQL, Postgres | | | | ●●●●● | Coding (C#, JAVA, VBA, Python) | ●●●🞅🞅 |
| **Interests** | | | |  | earth, global, globe, network, planet, web, world icon  **Languages** |  |
| Servers and Virtual Machines | | | | 🎔🎔🎔🎔🎔 | English | ●●●●● |
| RAID Configurations | | | | 🎔🎔🎔🎔🎔 | Hindi | ●●●●● |
| Opensource Technologies | | | | 🎔🎔🎔🎔🎔 | Bengali | ●●●●🞅 |
| New Programming Languages | | | | 🎔🎔🎔🎔🎔 | Spanish, Ukrainian | Learning |
| blue, briefcase, career, case, job, suitcase icon | **WORK EXPERIENCE** | | | | | |
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| http://media.glassdoor.com/sqll/14097/rei-systems-squarelogo.png  REI Systems Inc.  *April 2015 - Present* | | | **Business Analyst**  **Statistical Analysis & Enablement:**   * Currently involved in a project with the Department of Health (HRSA) to build and environment to analyze vast amount of public health data in structured as well as text form:   + Transforming various data sources into meaningful R datasets   + Providing information sessions and manuals on use of R for regression, hypothesis testing   + Performing Ad-hoc public health outcomes analyses originating from DOH, Senate, House, Whitehouse and regulatory bodies   + Deconstructing IP addresses to provide localized usage statistics for various functionalities, products and services   + Applying R packages, creating custom functions to automatically structure text data from web pages | | | |
| https://tse3.mm.bing.net/th?id=HN.608042759640975974&pid=1.7  Dun & Bradstreet Inc.  *Aug 2013 – March 2013* | | | **Statistician / Analytical Consultant**  **Statistical Analysis & Automated Insight Generation:**   * Developed an automated and self-sustainable generalized business process monitoring tool using only zero-cost open source resources that:   + Allows setting up a statistical process monitoring tool for any business data stream within hours. This tool is widely used in the organization for monitoring many business processes   + Leverages millions of control charts at a granular subgroup level to effectively detect shifts in behavior and generate actionable alerts based on concepts of stability, capability and customized trigger criteria   + Automatically and continuously updates data, generates alerts, and adjusts control limits when needed * Developed an automated tool to monitor the usage levels of 150k customer accounts in order to:   + Recognize specific trends and generate alerts requesting intervention from customer retention, cross-sell, up-sell and pricing teams.   + Compare a customer’s usage to their “peer group” to identify opportunities for business development.   + Implement an experimentation model studying the effect of various training or intervention programs on the customers’ usage of our products.   + Predict prospective customers’ usage of our products and model the pricing structure. * Developed an automated tool to monitor the inflow of customer complaints and generate alerts when an adverse trend is identified.   + This tool leveraged Shewhart’s control chart methodology to monitor volume and SLA-Non Compliance across 25k granular rational subgroups.   + This tool allows the user to control the depth of analysis depending on their focus and leadership level.   **Problem Solving and Innovation:**   * Developed unique visualization tools that leverage effective aggregation of data, coloring schemes and predictive insights to display large amounts of data in a comprehensible and aggregated presentation without losing the granularity of insights. * Developed parallel computing and multi-core algorithms in R when processing demands exceeded local resources   **Collaboration and Communication:**   * Deliver training to employees including senior leadership on using various internally developed tools. * Manage licensing of third party software tools. * Developed statistical models to explain and predict economic indicators like unemployment claims. * Actively working on understanding the network relationship between business entities to calculate the supply chain risk from natural disasters and other disruptions. | | | |
| http://images.all-free-download.com/images/graphiclarge/invacare_0_66563.jpg  Invacare Corporation *Dec 2012 – July 2013* | | | **Quality Engineer**  **Post Market Surveillance:**   * Developed the statistical process control mechanism to identify adverse trends in failure modes of products * Performed root cause analysis on adverse events and prepared plan of action   **Process Improvement (Six Sigma):**   * Developed improved design and work instructions for the complaint handling work stream | | | |
| http://www.msx.org/wiki/images/f/f1/Philips-logo.png  Philips Medical Systems *Feb 2011 – Nov 2012* | | | **Quality Engineer**  **Trending & Analytics:**   * Developed and implemented the mechanism for automated trend analysis of incoming complaints to alert the stakeholders of systemic or platform specific risk issues. * Developed the Data Analysis and Trending procedure for the organization. * Provided analytic support to Quality & Regulatory teams. Created in-depth reports to aid the decision making process of the management and the business. * Developed a BI Dashboard for the quantitative analysis of customer complaints aiding in investigation of issues and providing statistical rationale for Regulatory agencies to justify actions and non-actions. * Developed, Implemented and Maintained business metrics and KPIs. * Assessed Cost of Non Quality and suggested measures to control.   **Corrective and Preventive Action (CAPA):**   * Performed Root Cause Analyses for CAPAs, Prepared Sampling Plans for and evaluated effectiveness of the CAPAs. * Managed Compliance related CAPAs, and guided CAPA Owners through the CAPA process. * Developed relationships and network through across Business Units to distribute review activities, speed up the execution of CAPA Phases and overcome the challenges due to lack of resources.   **Compliance & Remediation:**   * Support various remediation activities of the business to achieve compliance and improve quality. Compiled weekly reports measuring the effectiveness of various Q&R processes and identifying opportunities for process improvement. * Provided data analysis support during external and internal audits and functioned as the Subject Matter Expert function for Data Analysis and Trending. * Developed automated tools for ensuring compliance of closed complaints to FDA regulations and organizational procedures. | | | |
| http://www.msx.org/wiki/images/f/f1/Philips-logo.png  Philips Medical Systems *Aug 2009 – May 2010* | | | **Biomedical Research Analyst**  **Project Management:**   * Supported multiple projects aimed at market positioning by developing new applications for current CT systems. * Collected inputs from key opinion leaders and customers and applied clinical knowledge to prioritize and integrate requirements. * Supported multiple beta sites globally with their statistical modeling and analytics needs. * Prepared periodic project updates, action items, directives and marketing material.   **Problem Solving and Innovation**   * Providing developers with clinical insights for algorithm development in oncology applications. * Evaluated and guided application development by third-party labs. * Analyzed data collected from various research projects to recognize market opportunities. * Developed a MATLAB prototype for a CT radiation dose lowering algorithm. Created a “Try & Buy” program demonstrating 50-80% dose reduction resulting in multiple in new orders in one month. | | | |