SHREYYAS VANARASE

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MS Computer Science student graduating December 2015 with extensive experience in full software development lifecycle from requirements analysis, design, development, testing, and deployment. Exceptionally strong in communication skills and presentations. Proficient in Java, Processing.js, C, MATLAB, Tableau, Node JS, Express, D3.js, Android Apps, and Linux OS.

EDUCATION

Georgia Institute of Technology, Atlanta, GA — Anticipated Graduation in December 2015
Masters of Science in Computer Science
GPA: 4.00

Georgia Institute of Technology, Atlanta, GA — January 2013 – May 2015
Bachelors of Science in Computer Science
GPA: 3.82 – Highest Honors

PROFESSIONAL AND RESEARCH EXPERIENCE

Real-Time Multivariate Stock Prediction Research, Atlanta, GA — May 2015 – Current
Student Researcher
- Developed original solution to predict stock price trend using *both* qualitative and quantitative data in real-time.
- Applying Big Data/machine learning algorithms to news/global events/tweets/financials to determine stock price trends for select companies.

BMW Part-Picking Optimization Research, Atlanta, GA — January 2015 – May 2015
Student Researcher
- Developed innovative solution using Google Glass to optimize BMW's X3, X4, X5, X6 vehicle part-picking assembly process.
- Headed alternative design research to enhance barcode scanner usability; our solution saves BMW over $14,000 in long term.
- Performed design study on current part-picking process to improve overall associates' work experiences at BMW.
- Conducted weekly meetings with BMW managers and associates to provide updates on the iterative prototype.

JPMorgan Chase, New York, NY — June 2014 – August 2014
Application Development Intern
- Solved vital client-facing problems using Kapital, JPMorgan's primary risk management application.
- Developed SmallTalk programs for the Front and Middle Offices.
- Optimized developer tools in Kapital and enhanced usability of GUIs.
- Integrated all USD futures curves into a single, unifying generator to price US trades more efficiently.
- Performed numerous P&L analyses on new features added to Kapital to minimize MTM variance.
- Created intuitive tutorial so newcomers can quickly gain familiarity with Kapital.

Twitter Distributed Tracing Systems Research, Atlanta, GA — January 2014 – April 2014
Student Researcher
- Investigated Zipkin, Twitter's distributed tracing system, to understand functionality of tracing systems.
- Implemented web-app on Apache Tomcat to display traces for Fibonacci & Prime Factorization code.
- Delivered presentation on analysis of final research outcomes and defined documentation for Zipkin for abstract web-app trace management.

GE Transportation, Melbourne, FL — May 2013 – August 2013
Onboard Systems Engineering Intern
- Provided insight into 10-year old GPS differential correction problem for AMTRAK and GE's China trains.
- Coded JAVA parsing program to generate correctly formatted files to run locomotive simulations.
- Optimized electrical schematic designs for Caltrain's chief computer system, Ethernet switches & braking systems.
- Conducted communications, display, and usability testing for GE's Australian locomotive display units.

Big Drum, Atlanta, GA — July 2012 – August 2012
Search Engine Marketing Intern
- Practiced SEO, PPC, and link building; employed effective online website diagnostic analysis tools.
- Applied Search Engine Marketing (SEM) tactics and utilized various aspects of website and design analysis.

LATEST PROJECTS AND DATA ANALYTICS EXPERIENCE

TwitterTicker – Twitter-Based Stock Price Visualization System — May 2015 – August 2015
- Developed faceted design using D3.js to analyze the effect of consumer reaction to a company's tweets on that company's stock price.
- Led the data gathering, data cleaning, and development of core application architecture.
- Performed sentiment analysis on approximately 20,000 company tweets for Google, Apple, IBM, Amazon, Intel, and Microsoft since 2007.
- Created stock timeline view using NVD3.js/JQuery/HTML/CSS using previous 8 years' stock price closing data from Yahoo Finance.
- Clustered company's tweets by favorites count to potentially correlate the most favorited keywords to increases in stock price.

Information Visualizations — May 2015 – August 2015
- *SPLOMS* – Designed Tableau SPLOM vis to analyze the most salient vehicle attributes consumers consider during car purchases.
- *Dashboards* – Designed Tableau dashboard displaying change over time in US presidential political party distribution in Georgia counties.
- *Co-occurrence Networks* – Constructed Alluvial vis to analyze character relationships through co-occurrence network in Romeo & Juliet.

Formation – Location-based Group Meeting Visualization System — January 2015 – May 2015
- Developed Android app to accelerate the group meeting process and to manage events efficiently by location-based communication.
- Built Node JS/MySQL backend to handle web requests for event management, group messaging, and location monitoring.
- Implemented Google Maps API to display individuals' locations in real-time and to quickly navigate to team members' locations.

QUALIFICATIONS AND ACHIEVEMENTS

- *Qualifications:* US Citizen - Eligible to work in United States
- *Programming:* Java, Android, Google Glass, Processing.js, Node JS, Express, C, SQL, Matlab, D3.js, HTML5/CSS, Python, Smalltalk
- *Achievements*: Highest Honors – Highest level of academic distinction for undergraduate degrees at GaTech
  Faculty Honors – Recognition for 4.00 GPA at GaTech multiple times
  Second Degree Black Belt in Kensho-Ryu Kenpo Karate Style