

Assistant Vice President Assistant Vice President Assistant Vice President - Global Markets and Technology, Bank of America Bolingbrook, IL find a challenging and stimulating position that leverages my over 10 years of leadership skills and experience in full life cycle of code development, Monte Carlo simulation, analysis, and statistical interpretation of very large volume of data. Work Experience Assistant Vice President Global Markets and Technology, Bank of America July 2015 to Present Assistant Vice President Bank of America, Global Markets and Technology July 2015 to Present Developing feeds in using python to aggregate product data from several sources into unified object oriented database. Also working on bitemporal lookup for financial instruments.

Developing several feeds out to pull data from object oriented database that are necessary to furnish to regulators for financial compliance Team lead Silicon Microstrip Tracker group at Fermi National Accelerator Laboratory June 2009 to Present Silicon Microstrip Tracker detector has close to a million read out channel. Mentored several junior level software developers, and data analyzers. Developed trigger menu using XML. Developed web pages using HTML Consulting Senior python developer client CBS local December 2014 to June 2015 Senior Python Developer client CBS local December 2014 to June 2015 Developed redesigned advertisement platform (Audio Ad Center) using python/flask, MySql for backend, and jinja2 templating, html, css, JS for front-end.

Improved functionality for advertisements for local businesses (called local offers) using python/django, and MySql. Developed admin interface to extract statistics for CBS audio road show (<http://cbsaudioroadshow.cbslocal.com/>) in python/django and mongodb. Senior python developer NESS technologies October 2013 to December 2014 Senior Python Developer NESS technologies October 2013 to December 2014 Developed webservices for Honda Financial Corporation: Developed full suite of webservices for Honda Financial Corporation in Django/Python Developed new interface with loan origination system. Improved internet car purchase for Honda Financial Corporation. Developing full unittest, and integration test coverage using mock, fixture etc. for new package development, and increasing test coverage for existing code base. Senior Applications Engineer Tata Consultancy Services September 2012 to October 2013 client BlackBerry. Senior Applications at Tata Consultancy Services/ BlackBerry

(09/2012-10/2013): Worked on e-mail protocol development for BlackBerry 10 Operating System: Developed code in python to better handle attachments in email in several versions of Active Sync, and IMAP. Worked in improving and closing several loopholes in corporate e-mail security, that is a fundamental selling point for Blackberry devices. Developed python codes to efficiently handle multiple read/unread, flag/unflag, and delete operations on emails. Worked closely with testing specialists to thoroughly test new features, and improvements. Addressed a lot of issues reported by customers, in a timely manner. Extensively used Python programming language, Sqlite, Eclipse IDLE, REST services, HTTP, Agile development/Scrum, BugZilla, and JIRA for bug tracking, Active Sync, IMAP, MIME, JSON, TCP/IP, SDK/NDK, SVN, and GIT. Operating system used for this project: QNX, and Windows. Senior research associate Indiana University - Batavia, IL September 2006 to August 2012 Batavia, Illinois (September 2006 to August 2012) Senior Research Associate / Software developer (team lead) Indiana University September 2006 to August 2012 Developed software in python, interfaced with oracle database to query and update calibration constants for close to a million detector readout channels. Developed python packages to understand performance of detector, and monitor environment parameters like temperature, humidity. This package also generated alarms when environment variables were out of acceptable range, and automatically sent e-mails to experts. Analyzed data to look for quark compositeness, conjectured to be the most fundamental building block of matter, not yet been discovered experimentally. Developed software package (mostly in C++, python, and linux shell script) to analyze dataset containing over 2 billion entries, and each entry containing over 50 objects, and each objects having over few 10s of variables. Developed criteria to select signal events (entries of interest in the dataset), over background (non interesting processes that mimic the signal). We have used several statistical technics including Kolmogorov-Smirnov test, multivariate techniques. Also developed software packages to run Monte Carlo simulation to model background, and tune analysis requirements on signal. Wrote software in C++ that was interfaced with specialized statistical analysis package called root for putting 95% confidence level limit on the process using Bayesian technic. Extensively used STL (Standard Template Library), in particular vectors, and linked list, for

high performance. Research scientist Stony Brook / Fermi National Accelerator Laboratory  
November 2002 to August 2006 Research Scientist Stony Brook / Fermi National Laboratory  
November 2002 to August 2006 Developed C++ code using Object Oriented design to monitor  
performance of detector, and analyze large volume of data. Several structs, and classes were  
developed to represent electronic modules, or chunk of data. Implemented methods in those  
classes to access and manipulate data pertaining to those electronic modules or chunk of data. As  
lots of codes were designed to be used for 24/7 operation with shifters, extensively used error  
handling, and input validation. Started to analyze data containing to look for quark compositeness.  
This work was continued during employment with Indiana University. Co-leader of jet energy scale  
group Stony Brook / Fermi National Accelerator Laboratory July 2003 to September 2005 Charge of  
the jet energy scale group is to provide precise calibrations of energies of jets of particles emanating  
from high energy collisions of protons and anti-protons. By performing careful fitting of data, and  
background modeling, achieved spectacular uncertainty of less than 3% for the calibration. Software  
package in C++ was developed for use by 500+ researchers, to publish over 100 articles in peer  
reviewed journals. Computational Skill: Proficient in Python/Django/Flask, Object Oriented  
programming concepts(OOP), RDBMS, SQL, Sqlite, MySql, Eclipse IDLE, REST, Agile/Scrum,  
Defect/Issue tracking tools JIRA, and Bugzilla, version control system like GIT. Proficient in  
Linux/Unix, QNX(embedded OS) and Windows operating systems. Expert in unittest using mock,  
db fixture etc. Expert level skill on regression analysis. Intermediate level knowledge in XML,  
HTTP, Active Sync, IMAP, MIME, JSON, TCP/IP, SDK/NDK, SVN, statistical analysis package R,  
log analysis using Splunk, C++ . HTML, CSS Basic knowledge in Javascript, Bootstrap, MongoDB,  
continuous integration tools like Jenkins. Research associate at SUNY Stony Brook / Fermi National  
Accelerator Laboratory September 2000 to November 2002 Post doctoral research associate  
Grenoble, FR January 1999 to September 2000 Professional Experience: Education Ph. D. in  
Physics in TIFR University of Mumbai - Mumbai, Maharashtra Masters of Science in Physics in  
Physics Jadavpur University Bachelor of Science in Physics in Physics Vidyasagar University

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