TUSHAR JAIN

https://www.linkedin.com/in/tusharnjain

+1 (631) 913-5501 tnjain@cs.stonybrook.edu

EDUCATION

STONY BROOK UNIVERSITY

Stony Brook, New York

Masters in Computer Science, CGPA: 3.84/4

- Aug 2016 Dec 2017 (expected)
- Coursework: Operating Systems, Analysis of Algorithms, System Security, Computational Biology
- Working in the File Systems and Storage Lab(FSL) under the guidance of Prof. Erez Zadok

VEERMATA JIJABAI TECHNOLOGICAL INSTITUTE (VJTI)

Mumbai, India

Bachelor of Technology (B.Tech) in Information Technology, CGPA: 9.4/10 (1st rank in Class)

July 2010 – May 2014

- Coursework: Operating Systems, Databases, Algorithms, Networks, System Software, Artificial Intelligence, Data Mining
- Awarded VJTI Certificate of Merit and Ratan Tata Scholarship during the years 2012, 2013 and 2014

TOOLS AND TECHNOLOGIES

- Programming Languages: C#, Java, C, C++, Python, SQL
- Technologies: .Net Framework, Hadoop, NUnit, Moq, Git, SVN, Visual Studio, Eclipse
- Database: MySQL, Oracle, MongoDB
- Web Technologies: HTML, XML, PHP, Javascript, AngularJS, NodeJS

EXPERIENCE 2 YEARS, 4 MONTHS

CREDIT SUISSE, INDIA Technology Analyst

July 2014 - July 2016

- Responsible for designing and developing sophisticated and scalable low latency algorithmic trading applications used for running high frequency automated trading strategies in multiple Financial Markets
- Developed various analytical, support and risk monitoring tools to prevent trading breaches and generate analysis reports
- Efficiently handled processing, storage and retrieval of various kinds of data from multiple sources
- Involved in lot of code enhancements, bug fixes, unit and integration testing of the applications making it more robust
- Implemented a new compliance module from scratch thus improving the execution speed of the applications by 35%
- Played a major role in the cross regional deployment of the trading applications
- Tools and Technologies Used: C#, Java, WPF, SQL, AngularJS, Visual Studio, Eclipse, MySQL

CREDIT SUISSE, INDIA Technology Analyst Intern

May 2013 - July 2013

- Worked on the development of an Automated Risk Control System designed for financial and regulatory risk management
- Performed a detailed analysis of existing system and presented ideas resulting in 30% improvement over the current system
- Tools and Technologies Used: C#, WPF, XAML, SQL, Visual Studio, MySQL

SHRADDHANAND MAHILASHRAM, INDIA Web Developer

Dec 2012 – Jan 2013

- Led the development of the company's website enabling people across the world to access it and make online donations
- Technologies Used: HTML, CSS, PHP, JavaScript, SQL

PROJECTS

Per Process System Call Vector

Operating Systems, Nov 2016 – Dec 2016

Implemented a kernel based system to support per-process system call vectors through which users can invoke different
implementation of system calls. The system implements a new clone system call to support the per-process system call vectors.

Stackable Tracing File System

Operating Systems, Oct 2016 – Nov 2016

• Developed a stackable tracing file system by modifying the existing Wrapfs file system to intercept read, write, lookup and other system calls to capture records of file system activity. All the trace records can be replayed from the user level.

Antivirus for Linux

System Security, Oct 2016 – Nov 2016

• Developed an antivirus for Linux to intercept all files and check against a known malicious pattern database. A user level program will update the pattern database accordingly.

Alternative memory layouts for the suffix array

Computational Biology, Oct 2016 - Dec 2016

• Implementation of alternative memory layouts such as Btree and Eytzinger in C++ for suffix array search operations.

Mergesort System Call in Linux Kernel

Operating Systems, Sept 2016 – Oct 2016

This project involved implementation of a new system call in Linux kernel that takes two input files, merge-sorts them, and
produces an output file. All checks and validations were done at the system level.

My Workspace Locator

Credit Suisse Asia Pacific Action Learning Project Competition, Dec 2015 – Feb 2016

• Designed and implemented an application which optimizes, regulates and monitors the usage of office space in the Credit Suisse Smart Working Environment. Finished 1st in the competition contested by Credit Suisse Technology Analysts all over Asia.

Performance Optimization for Image Searching On Hadoop Cloud

VJTI Final Year Project, July 2013 – April 2014

 The project involved performance optimization of storing, searching and retrieving fingerprints and face images from a large dataset using data mining classification and clustering techniques. It was implemented on Hadoop Cloud Infrastructure.

Student Dashboard

Credit Suisse VJTI Coding Challenge, Dec 2012 – Feb 2013

Designed and developed an application in which students and teachers can manage their profile, documents, activities, courses, assignments, blogs, forums, notifications, etc. Finished 1st in the Coding Challenge contested by more than 200 teams.