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VIVEK BANSAL

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EDUCATION

Stony Brook, NY **SUNY, Stony Brook University** **Expected: Dec 2019**

- Master of Science, Computer and Information Sciences.
- Coursework: Analysis of Algorithms; Asynchronous Systems; Operating Systems; Data Science; Artificial Intelligence; Computer Vision; Big Data Systems; Seminar in Algorithms.

Delhi, India **Delhi Technological University** **May 2014**

- Bachelor of Technology (B Tech) in Computer Science Engineering. GPA: 74.75%

TECHNICAL SKILLS

- *Proficient*: C++; C; Python *Intermediate*: Java; JavaScript; HTML; CSS; XML; DistAlgo; Prolog.
- Microsoft Visual Studio; Perforce; GIT; Eclipse; JIRA; Code Collaborator; Jupyter Notebook; OpenCV.

INDUSTRIAL EXPERIENCE

Member of Technical Staff-2 **Adobe Systems Corporation** **Oct 2015 – Aug 2018**

- Implemented FDK client of document health report to find unresolved links in document. *C++, Factory Design*
- Implemented feature of MRU and favorites file list to show on starter screen. *C++, HTML, CSS, JavaScript*
- Ported our product from 32-bit to 64-bit architecture. Implemented IPC mechanism via pipes to enable synchronous communication between 64-bit exe and 32-bit DLLs. *C, C++*
- Refactored code of referencing dialogs by using MVC architecture. *C, C++*
- Fixed Cadence issue by writing formatting rules inline in the XML file to enable postprocessing of it. *XML, C++*
- Optimized various code flows in the application using Visual Studio Profiler. *C++*
- Promoted to MTS-2 in May 2016. Significant contributor for 2 successful releases of the product. Mentored 4 new college graduates from Aug 2017 to Aug 2018.

Software Engineer **SanDisk Corporation** **June 2014 - Oct 2015**

- Implemented data structures and algorithms to efficiently store and retrieve the data from memory. *C*
- Designed and implemented a new framework of compaction to increase the memory utilization by 3-4 %. *C*

ACADEMIC PROJECTS

- **Ranking of Academic Papers Prediction:** Predicted ranking of academic papers available on arxiv.org. Considered parameters such as author's citations, domain popularity, page ranking algorithm to calculate paper score. *Python*
- **New York City Taxi Fare Prediction:** Predicted taxi fares in New York city using Random Forest Regressor. Dataset was taken from https://www.kaggle.com/c/new-york-city-taxi-fare-prediction/data. *Python, Regression, Visualization*
- **Google Analytics Customer Revenue Prediction:** Predicted natural log of revenue from a user on Google Store using LGBM regressor. Dataset was taken from https://www.kaggle.com/c/ga-customer-revenue-prediction/data. *Python*
- **Spam Filter:** Implemented Spam Filter using Naïve Bayes Classifier. Achieved precision of 95% and recall of 87% as the performance metrics in accuracy of spam detection. *Python, Machine Learning*
- **Viewstamped Replication Algorithm:** Implemented various operations like normal operation, view-change operation and recovery operation of viewstamped replication algorithm. Verified safety and liveness property as well. *DistAlgo*
- **Lamport Distributed Mutual Exclusion Algorithm:** Implemented Lamport mutual exclusion algorithm, verified its correctness and compared performance with different number of processes and requests. *DistAlgo, Python*

ACHIEVEMENTS

- **Adobe Bravo Spot Award** (June 2017): Fixed critical memory leak issue faced by many important users.
- **Member of Adobe Technical Summit** (Feb 2017): One of the 3 selected members, out of 50 candidates to take part in Adobe Technical Conference in Adobe San Jose headquarters, California.
- **SanDisk Gold Award** (Jan 2015): Awarded Execute and Exceed Gold Award to lead a team of 8 members; successfully completed integrating of an important feature in our product before deadline.