Shreyas Bhatia

github.com/shreyasbhatia09 linkedin.com/in/shreyasbhatia09

EDUCATION

Stony Brook University

Master of Science in Computer Science; GPA: 3.84/4.0

Stony Brook, NY

Aug. 2017 - Dec. 2018 (Expected)

Email: shreyas.bhatia@stonybrook.edu

National Institute of Technology - Bhopal

Bachelor of Technology in Computer Science; GPA: 8.16/10.0

Bhopal, India Aug. 2011 – July. 2015

Mobile: +1-631-428-9140

EXPERIENCE

Adobe Systems Incorporated

Bangalore, India Oct 2015 - Jun 2017

Member of Technical Staff 2

- Was part of the Installer, Build and Release Team and was mainly responsible for the development of Installers and Release Engineering Activities and end-to-end automation for different Adobe Products
- Developed various features in Build Scripts like Failure Recovery, Implementation of a Multi-Threaded Build System for Creative Cloud Disk Set
- Created scripts in Python to facilitate end-to-end automation of tasks involved in release engineering activities reducing the process time from days to a few hours
- Developed custom actions for installers in C++ and Java to handle new requirements for product installation for different operating systems.

Programming Skills

- Technical Knowledge: C, C++, Java, Python, Shell Scripting, SQL, MySQL, Machine Learning
- Web Technology: BootStrap, HTML5, CSS, JavaScript
- Version Management: Perforce, Git
- Operating Systems: MacOS, Windows, Linux
- Tools and Technologies: OpenCV, TensorFlow, CUDA, OpenCL, Jenkins, Jira, Apache Ant

Projects

- Improved Spam Filtering using non-uniform distribution of values in Hyperlink-Topic Search Algorithm: Hyperlink-Induced Topic Search is a link analysis algorithm that rates Web pages. The project aims to apply a non-uniform distribution in calculating the hub and authority score to reduce spam which is computed in parallel using CUDA. Twitter Social Network uses a HITS style algorithm to suggest user accounts to follow.
- A Plugboard Proxy for adding an extra layer of protection to publicly accessible network services:

 Designed a plug board proxy which adds an extra layer of protection to publicly accessible network services. Implemented it such that it can act as a client as well as a server, performed AES CTR mode encryption to secure the connection.
- Parallel Implementation of Histogram Equalization to improve contrast of images: Improved the contrast of grey-scale images using the Min-Max technique in histogram equalization. Each pixel was processed in parallel using OpenCL to gain an average speedup of 2.3 times on large images.
- Yelp Restaurant Photo Classification: Used Deep Learning to predict attribute labels for restaurants using user-submitted photos. It involves using the bottle-next features of a pre-trained CNN and using the OneVsRest technique with a base classifier as a linear SVM to generate tags. The F1-score using this technique was 0.77.
- Passive Network Monitor: Built a passive network monitoring application written in C++ using the library packet capture library. The tool could capture from a user-defined network device and supports BPF filters.

Publications

- Importance of GPGPUs in efficiency improvement of real-world applications: The paper discusses GPGPUs, their evolution, and their contribution to many real-world applications in which a GPU through GPGPU has improved their efficiency
- Improved Parallel PageRank Algorithm for Spam Filtering: The paper proposes an improved PageRank algorithm that non-uniformly distributes the PageRank values among all the outgoing links. The proposed algorithm attempts to mitigate spam and provide better results by using a non-uniform PageRank distribution. The proposed work has been implemented on NVIDIA Quadro 2000 GPU architecture using CUDA programming language.