#### Shubham Subhankar Sharma

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#### Education

M.Sc Computer Engineering - University of Pavia (September 2022 – Current)

B.Tech in Information Technology - IIIT Vadodara (August 2013 – June 2017)

12th Grade, Kendriya Vidyalaya NER Bareilly, UP (April 2011 - March 2012)

10th Grade, Kendriya Vidyalaya Lokra, Assam (April 2009 - March 2010)

CGPA - 9.8/10

#### Skills

C++, Google Apps Script, Python, Image Processing, Machine Learning, OpenCV, JavaScript, SVN, DataStudio, Git, GCP, Matlab, GDB, Latex, Wireshark

# **Work Experience**

## Vehant Technologies - Software Development Engineer - 2 (Feb 2020 - Oct 2022)

- Worked on various modules of XRay Baggage Scanning System to add significant features, thread support for faster execution and better buffer streaming system.
- Designed and implemented Z Effective prediction(using their atomic numbers) for identifying various objects.
- Integrated various image processing units namely Pseudo Colour, adjustable contrast maps, edge operations.
- Introduced various image enhancing techniques like super resolution, anti-aliasing, noise reduction in order to visually identify and differentiate between materials.
- Contributed to Threat Identification system(TIP) for sharp objects, Gun detection and Explosive detection.
- Optimised the code and increased the FPS of the system from 60 to 120.
- Worked on Dual energy colour map creation to improve the colour scheme in order to differentiate between organic, inorganic and metallic objects.

### Searce - Cloud Solutions Engineer (July 2017 - Jan 2020)

- Designed and implemented Cost-efficient, High-available, Fault Tolerant, Scalable and Distributed Systems on Cloud.
- Modernisation of some of the biggest legacy and VM based Infra setup to containers based setup on orchestration systems like Kubernetes, ECS.
- Worked onsite for e-commerce companies to automate business processes for CX, HR, Finance, IT and Engineering department.
- Built Dynamic code analysis and Vulnerability detection tool by integrating Bitbucket, SonarQube and Jira using Python.
- Developed Role Review Access, Mail Merge Solutions, End-to-end Onboarding/Offboarding solution, Call Recording Management Tool, Bulk User Creation/Deletion and Admin Console Management tool by leveraging Google Apps Script, JavaScript, HTML and Python.
- Built multi-class document classification tool for 2.5L docs using CNN in PyTorch and Vision API.
- Analysed and visualised 5TB of e-commerce data by using Apache Spark and Google Data Studio.
- Implemented Google Cloud Search using Java to index and search in 10TB of ERP & Intranet data.

# Searce - Cloud Engineer (Intern) (Jan 2017 - June 2017)

- Increased resource availability by 38% by using Tessel proximity sensors to monitor Meeting Rooms and ensured availability of resources using Google Calendar API.
- Built customised Real time-dashboards by fetching data from Google Analytics and Legacy Systems.

- Overhauled Internal Performance Dashboards for better management. This increased team efficiency by 35% MoM.
- Audit and User Usage Reports Integration with SIEM(Arcsight).

### IIIT Vadodara - UG Teaching Assistant (DBMS and OS) (Jan 2016 - Nov 2016)

- Conducted in-depth lab sessions and tutorials on OS topics like Multi-Threading, Process Scheduling Algorithms, Memory Management, Paging, Segmentation.
- Lead hands-on demos and tutorials on DBMS topics like MySQL, Normalisation, ER Model, Memcached, CAP Theorem, Concurrency Control, OLAP systems, Distributed Systems.

# **Personal Projects**

- DumpTheGit searches through public repositories to find sensitive information uploaded to the Github repositories. (2019)
- AutoSource is an automated source code review framework integrated with SonarQube which is capable of performing static code analysis/reviews. (2019)
- Implemented Query Auto Completion using Trie data structure using Brute force and Heuristic based approach in C++. (2016)
- Motion Detection and Object Tracking for CCTV videos by extracting Contour Features in OpenCV. (2019)
- Implementation for Canny Edge Detection and Harris Corner Detection (2015)

### **Achievements**

- 1st Prize(1 Lakh) at N/Core Hackathon organised by HackerEarth and Omidyar Networks. (2018)
- Represented Dehradun Region in U-14 Table Tennis National at KVS Meet. (2006 and 2008)
- Won gold (Football) and Silver(Volleyball) medals at Inter-IIIT Meet, Kancheepuram. (2016)
- MIT Media Lab Design Innovation Workshop. (2015)
- Certification of Merit in English All India Senior School Certificate Exam. (2012)

## **Position of Responsibility**

- Served as Head boy in class 12th. Organised daily assembly, sports and cultural events for the year.(2011-2012)
- Member of the Sports Committee, Programming Club and Mess Committee during undergraduate. (2013-2017)

## Languages

- Hindi (Native)
- English (Fully Proficient)