

SWAPNIL KHARCHE

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EDUCATION

STATE UNIVERSITY OF NEW YORK AT BINGHAMTON

Binghamton, NY

Master of Science in Computer Science

GPA: 3.68/4.00

05/2019

Relevant Courses: Algorithms & Data Structures, Computer Architecture, Operating Systems, Design Patterns, Data Mining

COLLEGE OF ENGINEERING, PUNE

Pune, MH, India

Bachelor of Science in Computer Science

05/2015

TECHNICAL SKILLS / PROJECTS

- **Programming Languages:** Java (Advanced), C++/C (Intermediate), Python (Beginner), JavaScript (Beginner)
- **Web Technologies:** HTML5 / CSS3 (Beginner), React (Beginner), Spring (Intermediate), REST APIs (Intermediate)
- **Databases:** MySQL (Intermediate), Redis (Beginner), DB2 (Prior Experience)
- **Other Tools/Applications:** Linux, Git, Agile, Docker, AWS, ROS, CI/CD tools, ITIL, SDLC
- **CPU Pipeline Simulator Project:** Implemented an assembly instruction pipeline simulator to mimic the behavior of a speculative modern CPU using queues and buffers with different memory implementations such as Cache and In-memory storage. *Utilized – Java, IntelliJ, Git.*
- **Recommendation System Project:** Designed a recommendation system using the collaborative filtering on user preference rating. Designed an API with two endpoints to get data on the users and the most preferred item for that user. *Utilized – Python, pandas, Flask, Postman.*
- **Global Biometrix App Project:** Optimized a full stack web application aimed at providing background checks for people at local events and conferences. *Utilized - React, Spring Boot, REST APIs, JavaScript.*

EXPERIENCE

TATA CONSULTANCY SERVICES - STRYKER CORPORATION

Kalamazoo, MI

Software Engineer

10/2019 - Present

- **Teamwork:** Coordinated with multiple cross functional teams for integration and configuration of a cloud based procurement application used by about 4000 company employees, with multiple downstream applications. Developed REST APIs to handle real time requests to get account and purchasing data with MySQL and Redis.
- **End User Focused:** Observed large amounts of manual efforts by the procurement team. Identified root cause of efforts by meeting with business users. Introduced automated triggers based on business requirements to execute data integration to resolve inefficient data gaps, reducing manual efforts by 20%.
- **Technologies:** Spring Boot, RESTful APIs, XML, JSON, MySQL, MongoDB, Microservices, GraphQL, Java8.

VEHWARE

Binghamton, NY

Computer Vision Intern

09/2018 - 12/2018

- **Initiative:** Identified inefficient processing times for a computer vision program used for real-time hazard detection. Spearheaded a project to improve efficiency by applying an optical flow algorithm and machine learning to focus hazard detection on areas of interest, reducing overall processing time.
- **Innovation:** Created a Web API that allowed users to call the OpenCV code using web2py based on MVC framework, for easier access to the code.
- **Technologies:** OpenCV, C++, Python, TensorFlow, YOLO, MVC.

ACCENTURE SOLUTIONS

Pune, MH, India

Application Development Analyst

10/2015 - 08/2017

- **Development:** Developed web applications for client server environments and added functionalities to existing applications using Java/J2EE technologies.
- **Data Analysis:** Performed complex SQL queries to generate data reports which lead to correction of multiple issues in the client application.
- **Technologies –** Java/J2EE, MySQL, JDBC, Maven.

ADDITIONAL INFORMATION

- Interests/Hobbies: sketching, traveling, movie enthusiast