

Piyush Bag

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EDUCATION

Santa Clara University, Santa Clara, CA

Masters in Computer Science

Expected: Mar 2023

Courses: Operating Systems, Machine Learning, Distributed Systems, Software Dev. Life Cycle, Cloud Computing

University of Mumbai, Mumbai, India

GPA: 7.05/10

Bachelor of Engineering in Information Technology

May 2016

Courses: Data Structures & Algorithms, DBMS, Object-Oriented Programming, Computer Architecture, Design Patterns.

TECHNICAL SKILLS

- **Programming Languages:** Python (Proficient), C, Java, JavaScript
- **Web Technologies:** Flask, Django, Django REST, React.js & Redux, Node.js, Bootstrap, HTML, CSS
- **Other:** PostgreSQL, RDBMS, MongoDB, REST APIs, Agile, Postman, AWS, GitHub

EXPERIENCE

Software Engineer

Dec 2016 – Mar 2021

Tata Consultancy Services, Mumbai

Analytics and Insights Unit: Flask/Django Web Developer

- Built and Authentication service in Flask using Flask-Login including features - Forgot Password, Reset Password by Admin, Change Password.
- Developed and implemented JSON Web Tokens for authentication and authorization.
- Implemented SMTP mail setting in the application for features like Registration Page – confirm user email ID and Forgot password – new password in the email.
- *Assisted in design functionalities that led to code optimization by 20%; leveraged Bootstrap and Javascript.*
- *Developed a fully automated continuous integration system using Git, bitbucket cloud pipelines, slack messaging and allure reporting.*
- Built an eCommerce website using Python in Django, Django REST Framework and Bootstrap 4.
- Created a REST API using Flask SQLAlchemy ORM and Flask-Marshmallow.

Retail Unit: Web Scraper

- Utilize the requests library and lxml parser, and scale up to deploy a new scraping algorithm to scrape top product information from a major retail online store.
- Fetched data from multiple online sources, cleanse it and build APIs on top of it
- Created a Scrapy Crawler to build the datasets or minning.

PROJECTS [Github](#)

Feel the Smile

- A Face Recognition Web App with Machine Learning in Flask framework for Blind people to help them recognize when someone smiles at them, the application beeps and vibrates once.

Utilized: Flask Framework, REST APIs, OpenCV, EigenFaces with PCA, Face Recognition Classification Model with Support Vector Machines

The Vault | LA Hacks Hackathon

- Developed Natural Language Processing Models to analyze customer reviews on social media and identify customers sentiment for Public Relations Industry.

Utilized: Performed Tokenization and Count Vectorization followed by Text cleaning Pipeline, Trained a Naïve Bayes Classifier

IMDb DBMS

- Designed ER diagram according to the business logic and requirement. Create Database including movie, user information, rating, tags etc.
- Parsed 10M dataset from IMDb and Rotten tomatoes movie review system into my oracle database.