

# Yashraj Deepak Bharambe

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## EDUCATION

### Master's in Computer Science

August 2023 - May 2025

Arizona State University, Tempe, AZ

GPA: 4.0/4.0

Relevant Coursework: CSE 572 Data Mining, CSE 543 Information Assurance and Security, CSE 579 Knowledge Representation and Reasoning, CSE 546 Cloud Computing, CSE 565 Software Verification and Validation testing, CSE 578 Data Visualization.

### BTech in Information Technology

July 2019 - June 2023

JSPM's Rajarshi Shahu College of Engineering, Pune

GPA: 9.8/10.0

Relevant Coursework: Data Structures, Database Management System, Computational Complexity and Algorithm.

## TECHNICAL SKILLS

**Programming Languages:** Java, C/C++, Python - Numpy, Pandas, Matplotlib, Keras, MySQL

**Web Technologies:** HTML, CSS, React, NodeJS

**Tools, Databases and OS:** Git, Visual Studio, Windows, macOS, Linux/Unix

## PROFESSIONAL EXPERIENCE

### Java Full Stack Intern, Capgemini, India

January 2023 - May 2023

- Played a key role in the development and ongoing support of Penske's software infrastructure, utilizing the Spring framework.
- Delivered project accomplishments and results to senior leadership, yielding a 15% efficiency boost and 10% cost reduction.
- Showcased proficiency in various cutting-edge technologies, such as Spring Core, Spring MVC, and MongoDB, reflecting a diverse skill set and mastery of modern tech stacks.

### Data Science Intern, REG-ex Software Services, India

July 2021 - October 2021

- Applied advanced Deep Learning and Machine Learning methodologies to optimize projects, delivering substantial performance enhancements and achieving a notable 20% increase in accuracy across diverse applications.
- Spearheaded a substantial project focused on garbage classification, leveraging image analysis to categorize images into six different classes: glass, paper, metal, plastic, cardboard, and trash.
- Classified over 5000 images, achieving an impressive 92% accuracy rate through rigorous model refinement and optimization.

## RELEVANT PROJECTS

### Multi-Media Personalized Recommendation System: Leveraging User Preferences and History, Personal Project (Arizona State University)

August 2023 - December 2023

- Led the creation of an advanced multimedia recommendation system, overseeing the exploration and curation of an extensive library with 700,000 movies, 225,000 TV series, and 10 million books.
- Elevated the recommendation system's performance by optimizing a content-based filtering approach with BERT embeddings, resulting in a 25% enhancement over traditional methods.
- Highlighted the system's robustness by achieving an inter-list similarity of 0.833, demonstrating a strong correlation between recommendations across movies, books, and TV shows.

### Churn Prediction in Telecom Industry, Final Year Project (JSPM)

January 2023 - May 2023

- Analyzed dataset comprising 100,000 prepaid telecom customers, encompassing 226 features spanning four months.
- Enhanced churn prediction with Logistic Regression, SVM, Random Forest and XG-Boost, achieving a 94.19% accuracy.
- Achieved a remarkable 94.19% predictive accuracy through hyperparameter tuning, optimizing XG-Boost performance.

### Quiz Application using Spring Framework, Personal Project

January 2023 - April 2023

- Designed and built a user-centric quiz application with Spring Boot, leading to a 20% UX improvement and establishing optimal frontend-backend communication through RESTful services.
- Optimized project management with Maven, achieving a 30% increase in efficiency for dependencies and deployment, while engineering database schemas for a 25% enhancement in data integrity and retrieval speed.
- Strengthened the application by leading the implementation of integrated authentication and key features such as quiz creation and scoring, while ensuring comprehensive test coverage of 95%.

## PUBLICATION

“Churn Prediction in Telecom Industry”, *2023 International Conference for Advancement in Technology (ICONAT)*, [IEEE](#).

- Utilized advanced Machine Learning techniques encompassing Logistic Regression, SVM, Random Forest, and XGBoost, resulting in a predictive accuracy of 94.19% for the Churn Prediction project involving 100,000 prepaid telecom customers.
- Published research on “Churn Prediction in Telecom Industry” at the 2023 International Conference for Advancement in Technology (ICONAT), showcasing expertise in predictive modeling and contributing to the academic community.