

# BHAVANA KAPA

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## EDUCATION

### Master of Engineering, Computer Science (4.0 GPA)

August 2023 – December 2024 (expected)

University of Cincinnati, College of Engineering and Applied Science, Cincinnati, Ohio

*Courses Taken: Advanced Machine Learning, Cloud Computing, Information Retrieval, Distributed Operating Systems, Advanced Algorithms.*

### Bachelor of Engineering, Computer Science (3.78 GPA)

July 2019 – April 2023

Chennai Institute of Technology (affiliated with Anna University), Chennai, India

*Courses Taken: Data Structures & Algorithms, Database Management, Object Oriented Programming, Computer Networks, Artificial Intelligence.*

## SKILLS

- **Programming Languages:** Python, Java, C, SQL, JavaScript, TypeScript
- **Frontend Development:** HTML, CSS, React.js, Material UI, Bootstrap
- **Data Analysis and Visualization:** Pandas, NumPy, Matplotlib, Seaborn, SciPy
- **Machine Learning and Deep Learning:** TensorFlow, scikit-learn, OpenCV, Flask, NLTK
- **Version Control:** GIT
- **Databases:** MySQL
- **Cloud Services:** AWS

## EXPERIENCE

### Software Development Intern

June 2022 – May 2023

Virtusa | Chennai, India

- Assisted in developing and maintaining web applications using React.js, focusing on creating responsive and interactive UI.
- Collaborated with senior developers to integrate front-end components with back-end services using Node.js APIs, ensuring smooth data flow and functionality.
- Contributed to the development of an e-commerce platform, implementing product listing and shopping cart features using React.js, HTML, and CSS.
- Worked with the team to enhance user authentication by integrating a new login API, improving security and user experience.

## TECHNICAL PROJECTS

### AI Assistant Web Application

January 2024

*Technical Stack – React.js, Alan AI, Material UI, HTML, CSS, JavaScript.*

- Developed an interactive web application using React.js and Material UI to assist users in staying updated with news by utilizing Alan AI for voice-based interaction.
- Users can inquire about news updates by specifying topics of interest or mentioning any preferences, like news sources, and the application provides relevant news articles while also reading them aloud.
- Solved integration challenges of voice technology with React.js and ensured application performance across multiple browsers.

### E-Commerce Product Recommendation System

March 2024

*Technical Stack – Collaborative Filtering, Clustering, Python, NumPy, Pandas, Matplotlib, Scikit-Learn.*

- Developed a three-part product recommendation system for e-commerce businesses.
- Popularity-based Recommendations: Suggested popular products to new customers using item popularity scores.
- Collaborative Filtering: Created a model-based collaborative filtering system with Scikit-Learn, achieving 80% accuracy in top-5 recommendations based on similar customer's purchase history and item ratings.
- Cold Start Recommendations: Used TF-IDF and K-Means to group similar product descriptions, improving recommendations for new users and items

### Ticket Booking Application

December 2023

*Technical Stack – HTML, CSS, JavaScript, Bootstrap, Ellipse, Java Servlets, MySQL.*

- The primary objective is to develop an internet-based movie ticket booking service.
- Designed user-friendly interfaces with HTML, CSS, and Bootstrap for seamless booking experiences. Implemented backend functionality using Java Servlets to handle user requests and manage ticket reservations.
- Utilized MySQL for efficient database management, ensuring smooth storage and retrieval of booking information.
- Streamlined the booking process, leading to a 20% increase in booking efficiency compared to previous manual methods.

## ACCOMPLISHMENTS

- Machine Learning Specialization Certification - Stanford University
- Winner - Intra-College ML/DS Hackathon - Chennai Institute of Technology
- Gold badge in Python and Java Programming - Hacker Rank