

Kush Pandya

9709881332 | kushpandya1111@gmail.com | [LinkedIn](#) | [GitHub](#)

Education

Master of Science in Computer Science

Colorado State University

Coursework: Artificial Intelligence, Big Data, Image Computation, Machine Learning, Natural Language Processing

January 2020 - Present

Fort Collins, Colorado, USA

Bachelor of Engineering in Computer Engineering

Alpha College of Engineering and Technology

Coursework: Calculus, Data Structures, and Algorithms, Database Management Systems, Object-Oriented Programming with Java

July 2015 - May 2019

Gandhinagar, Gujarat, India

Technical Skills

Programming Languages: Java, Python, C#, C/C++, Kotlin

Web Technologies and Databases: React JS, HTML, CSS, SCSS, JavaScript, XML, Firebase, MySQL

Tools & Others: Android Studio, Azure, Git, Postman, Spring Boot, Unity 3D, Visual Studio Code

Experience

Graduate Research and Teaching Assistant

Colorado State University (C#, Python, Unity 3D)

August 2022 - December 2022

Fort Collins, Colorado, USA

- Implemented Qualitative Spatial Relations(QSRs) between 3D objects to find geometric relations between them.
- Incorporated Allen's Interval Algebra and Region Connection Calculus 8 to construct a novel data set to train models.
- Achieved embedding spaces by building a data set and training a neural network based on machine learning.
- Provided support to 107 graduate students (Engaging in Virtual World) by creating virtual reality projects in Unity3D.

Software Engineer, Android

Versatile Technolabs PVT. LTD. (Java, Kotlin, XML)

July 2019 - December 2019

Ahmedabad, Gujarat, India

- Proficient in using Android components like Activities, Services, Broadcast Receivers, Google Maps, JDBC, JSON, XML, etc.
- Designed a monitoring application for parents to monitor activities on their Child's mobile and if necessary restrict activities.
- Developed an efficient vendor monitoring application to track the status of work of the employee with the help of photos.
- Implemented and deployed some other applications like Christmas Countdown, E-commerce application, EMI calculator.

Software Engineer Intern, Android

Aimcrafters Software PVT. LTD. (Java, Kotlin, XML)

January 2019 - June 2019

Ahmedabad, Gujarat, India

- Developed an online appointment booking application for a barbershop that manages appointments, and walk-in customers.
- Reduced memory leaks by using fewer static references resulting in a 10% increase in the application optimization.
- Learned and developed a few advanced user interfaces, strong application structures, and REST API integration into use.
- Modified the data access layer during data migration from MySQL to make the application 12% more efficient and optimized.

Projects

Fashion E-commerce Web Application (React JS, Firebase) [Source Code](#)

August 2021 - October 2021

- Developed and deployed a highly available E-commerce web application for online shopping men's and women's wear etc.
- implemented user-authenticated sign-in and sign-up processes, add-to-cart functionality, and Stripe API payment setup.

Movie Recommendation System (Python, PySpark) [Source Code](#)

September 2020 - December 2020

- By using Collaborative Filtering based on reviews and movie preferences, a movie recommendation system was updated.
- On the MovieLens data set, using Spark with PySpark API, the memory-based method produced an RMSE of 0.91.

Parental Control Application (Java, Kotlin, XML)

October 2019 - December 2019

- To monitor children's device activities, I developed a parental control service application that works well on mobile devices.
- Application can track and limit how much time they spend using smartphones or using age-inappropriate sites and apps.

Voting Application (Java, XML, Firebase)

February 2019 - April 2019

- Designed and developed a highly consistent online voting application with fingerprint verification to authenticate the user.
- Integrated fingerprint hardware device to make the application more resilient across all android based smart devices.

Augmented Furniture (Java, XML, ARCore, Firebase) [Source Code](#)

August 2018 - December 2018

- Developed an interior design application using Augmented Reality to predict how furniture will look before purchasing it.
- Implemented 3D virtual replicas of the furniture in the user's real house or workplace using augmented reality library ARCore.