

PROJECT PROPOSAL

RENTAL PROPERTY RESERVATION SYSTEM (RENT-A-PLACE)

Kariyavula Gopika Manvitha (NET ID: kxg210060)

Pritika Priyadarshini (NET ID : pxp210104)

Kanya Krishi (NET ID : kxk220008)

Sailesh Sriram (NET ID: SXS170005)

Bhanu Prakash Bonthagorla (NET ID: bxb220003)

DATE : 17th September 2022



Project idea: A platform to find or list rental houses in a locality.

Summary

Our platform will help people relocating to new places find comfortable temporary accommodation with a homely vibe at a relatively cheaper cost (as compared to nearby hotels). In addition to offering customers a wide range of homes to select from, Rent-A-Place allows people to rent out their own properties for a given period of time.

Our Rental System platform would help create a free and easy Rent-A-Place account for privacy of data and better user experience. It shall require a simple username and password to authenticate the customer and allow access to their account. This platform can have two different categories of users that utilize this system - renters and owners.

As a renter, this platform offers the customers a search and filter facility with an expansive selection of houses ranging from various pricing categories, number of bedrooms, available dates, different locations and sizes of houses. This filter facility will help to narrow down choices while selecting a place of stay and ensure they have found the right house as per the desired requirements. Before making a booking, the host may request a short introductory message from the renter stating their intent during the stay and also an agreement to abide by the rules of the house.

As a house owner, this platform offers to turn a place into profit by helping them put up their property up for rent. A renter could provide information such as layout of the house, short description of the surrounding neighborhood and facilities present, amenities such as kitchen, wi-fi, and also a set of rules to be followed by the occupants. It is crucial for the house owner to also provide the location details, size and price of the house. It is important for the host to also ensure the house is well maintained and legitimate.

Overall aim of this platform is to make sure the entire process of renting out a place or hosting a place is done easily.

Relevance of the problem

1. **Intent:** As people travel around the world or relocate to new cities, they are on the lookout for stay options. Being new in an area and searching for a place to stay, be it temporary for a few days or a few weeks can be challenging. Since one may not be familiar with a neighborhood, they may not know about the available options for renting a house. Their only option would be to look out for any advertisements or try to contact some realtors in the area, which brings in a lot of hassle and may take quite some time. Our platform "Rent-A-Place" aims to help people find rental options at affordable rates in the area of their choice. Several times when people are out of town or not staying at their current residence, they might want to rent out their home temporarily for a certain period in the hopes of earning some extra cash as well as helping out other people with their stay needs.
2. **Background information:** Finding accommodation in big cities, in a safe neighborhood and also at a cheaper rate can be difficult, especially when one does not have enough background of the place. When people want to stay in a given location for a longer time period, say 2 to 3 months or so, they are looking for cheaper options as a hotel would definitely be costly to book for that long period. They would also prefer to stay in a place that is more spacious, perhaps a kitchen where they can cook and avoid expenses on dining out every day. On the other hand, there also exist owners who are going out of town or moving out temporarily, and want to lease their homes for that period. Since hosts can set their price and customers can directly contact the owners instead of going through a realtor, this option provides ease and is cost friendly. These two sets of people satisfy each other's needs and our application will make it easy for both parties to connect with each other and make a reservation at their convenience.
3. **Literature review:** There are a number of platforms which have worked on solving the problem at hand. These include websites like airbnb, booking.com and tripadvisor. These platforms identified the market need for having affordable rental homes and solved the task of connecting customers to potential home owners. By developing solutions in the form of a property management software, users are now able to find rentals as per their requirements by conveniently using an application. These applications are very user friendly with multiple core features such as viewing and searching places by various filters and multiple reviews sorted by date which helps customers pick the best deals. Since the whole process is online, customers can get virtual tours, chat directly with owners and even pay online for their booking.

Detailed problem description

With “Rent-A-Place”, owners can put out their property for rent and interested paying guests can occupy the place for a given time period, at an agreed upon cost. “Rent-A-Place” would allow users to create an account as a renter (a person who is looking for a place to reserve) or a house owner (a person who is willing to rent out their place). Our application would enable owners to post their homes for rent according to their desired time frame and publish a cost for billing. Our platform shall allow users to search for stay options based on their preferences of number of bedrooms and bathrooms, price, location, area in square feet etc. The application would enable users to contact the owners regarding any queries. Based on the availability of the property of choice in the desired time period, customers can book a place. Our rental property reservation system would ensure that properties that are not available in customer’s required time frame are not listed to them and would not allow them to book it.

Design issues and limitations

Critical design issues:

1. Handling multiple customer requests poses a challenge for the system. If the number of requests increases, the servers would have to scale in a manner that meets the amount of requests.
2. Protection of customer data (e.g. past reservations, credit card, bank account information, contact information) through practices such as encryption would be needed to ensure privacy and isolation among each account.
3. The system may face challenges in different scenarios like scalability issues, loss of data, natural calamities, and power outages and must be designed to be operational no matter the circumstance.

Constraints and limitations:

1. The initial available options are subject to the data available in the selected dataset that is obtained from Kaggle. The choice of location may be limited to a certain area for now.
2. The Rent-A-Place system cannot process payments, customers will only be able to book their slots for their property or properties of choice.
3. The system doesn't offer an option to provide virtual tours to the customers. The customer has to depend solely on the renter to get a tour of the place.
4. The customers do not have the option to add reviews and upload photos.
5. The Rent-A-Place system does not allow the customers to like or dislike a house that they had rented.
6. The Rent-A-Place system does not filter the houses based on any other amenities like wi-fi, water availability, electricity etc. that are present.
7. Reliance on 3rd-party software such as Google Maps to track current location for suggesting properties nearby is a risk such that core functionalities may break when these softwares are down.
8. The Rent-A-Place system does not perform background checks of the renter or seller for legal authorization.
9. The Rent-A-Place system does not help track the earnings made by the host.

Approach

We want to tackle this problem by applying Object-Oriented Analysis and Design concepts to build API functionalities that allow renters to rent a house/apartment based on different needs. These functionalities also allow owners to post their properties on the system for lease. These functionalities also include registration and logins to create user profiles. We have outlined a detailed step approach that we plan to take below.

Steps to generate the solution -

- To view the system as a group of objects and establish relationships between them and how they will interact with each other.
- Expect to use a client-service architecture that could have up to five different layers.
- Collate data for houses to simulate the initial information users might be looking for—use online resources to get this data, such as Kaggle.
- Design the database to store application data and efficiently retrieve information based on the user's query.
- Build robust APIs that contain many core functionalities, such as
 - Reserving a house
 - Creating a new reservation
 - Reading the reservation
 - Updating reservations such as the date, duration, and name of the booking
 - Deleting a reservation
 - Searching for properties based on filters
 - Filter Parameters: Destination, Date and Duration, Number of Guests, Number of Bathrooms, Bedrooms, Type of House (e.g., House, Apartment, Hotel, Ranch), Price Range
 - Register a new user
 - User can be a renter, owner, or both
 - Login
 - Adding a listing of owner's property
 - Updating a property listing, such as the picture of the property or price
 - Deleting a property listing

Analyzing the performance of our solution:

- We will analyze performances of different components such as
 - Server-Side/Business Logic Performance - Performance of the Java Backend solution

- Database Performance: Performance of query processing that could include multiple tables and join operations
- CRUD Functionality Performance: Performance of the different CRUD functionalities for reserving properties and adding property listings

Alternatives:

- One alternative to our solution could be using commercial solution third-party APIs (e.g. Airbnb, Vrbo) instead of building our own. We could readily build a new UI that calls these commercial solution's APIs from the backend. However, this alternative is not a viable solution as we look to get exposure to the Object-Oriented paradigms, which are part of the backend of this project.
- Another alternative to this solution is to use different components. Instead of Relational Databases, we could use NoSQL databases like MongoDB or Cassandra that do not have to follow a table schema. If we use RDMS, then the design of schema and relations will take additional time.
- Since we are using data from Kaggle to simulate the property listings, another alternative could be to create mock property data. This will give us more freedom and allow us to add additional properties that are important to each listing. However, due to time constraints, this idea is not viable.

Deciding on the best alternative depends on how much time we have and how many resources we can contribute to the alternative approach. If we were to choose the NoSQL approach, we would have to know how long it would take us to set up a MongoDB or Cassandra cluster and how many people are knowledgeable enough on our team to implement it. We would also have to factor in requirements like how we would be able to map the data from these Databases to our backend systems in an efficient and timely manner. This is not only for this alternative but for other alternatives as well. Therefore, we would consider time, resources, and system compatibility before taking an alternative approach.

Project Management

Project duration - 09/17/2022 to 11/19/2022

Schedule of tasks:

1. Project proposal
2. Object oriented analysis and architecture design
 - Class diagrams
 - Implementation of class diagrams.
 - Sequence diagrams
 - Implementation of sequence diagrams
3. Database design
 - Define schema and ER diagram
 - Define relations and keys
4. Designing and implementing APIs for each core functionality
 - Login/Register (Co-owners – Sailesh, Gopika)
 - Search based on filters (Co-owners – Bhanu, Pritika, Kanya)
 - City
 - Dates
 - Bedrooms
 - Bathrooms
 - Area
 - Price Range
 - Adding a property (Co-owners - Sailesh, Pritika)
 - Reserving a property (Co-owners - Bhanu, Gopika)
 - Updating a reservation (Co-owners – Kanya, Sailesh)
5. Sanity testing of each API
6. Integration and testing of all features

Deliverables for each iteration

1. Iteration 1:
 - a. Initial conceptualization of ideas/designs that can lead to possible solutions.
 - b. Reporting intermediate deliverables of code-based designs and UML class and sequence diagrams.
 - c. Expect to have the search and registration functionalities completed
2. Iteration 2:
 - a. Delivering all functionalities including searching, registration, adding properties, and reserving properties.
 - b. Delivering the code base that is completely tested with final designs and implementing improvement suggestions received.
 - c. Submission of final report.

Team qualification

Team members:

Kariyavula Gopika Manvitha - Completed my bachelor's in Computer Science and Engineering and also completed my internship in AT&T as a technical intern. I have been exposed towards full-stack development. Worked on a virtual assistant project using sanity.io. I Have good foundation in C, Python, Java

Pritika Priyadarshini - Having 2+ years of software engineering experience at VMware and having done various internships, I have exposure to building enterprise applications. I have previously worked on projects using relational databases, REST APIs and also have a background in Object Oriented Programming using Java.

Kanya Krishi - I am a CS graduate with 3 years of work experience in Nokia Solutions and Networks. I have worked on various 3G, 4G and 5G network optimization modules belonging to Nokia's EdenNet platform. I have also done internships that involved building software to automate manual tasks performed by the employees. I have a strong foundation in Python and Java.

Sailesh Sriram - I am a CS graduate who has done 3 internships. My most recent internship was at Goldman Sachs where I was a software developer engineer intern and worked on building a portal that displays financial position data. I have done my AWS ML Certification and I know Java, Python, C++, Java Spring Boot, and Angular. I also have a foundation in Object-Oriented Programming.

Bhanu Prakash Bonthagorla - I did my bachelors in Information Technology. Have a total six years of experience as SAP Hybris Commerce developer and Android Application developer in Accenture and IBM. I have developed the e-Commerce applications for Harley-Davidson, Henkel and Samsung. Currently I'm pursuing my masters in computer science.

Kanya Krishi

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EDUCATION

Master of Science in Computer Science - Intelligent Systems Track

(Aug 2022 - Present)

The University of Texas at Dallas, Richardson, Texas

Design and Analysis of Algorithms, Database Design, Object Oriented Analysis, and Design

Bachelor of Engineering, Computer Science

(Jul 2015 – July 2019)

BMS Institute of Technology & Management (BMSIT), under Visvesvaraya Technological University, India.

Gold Medalist in the Computer Science Department.

SKILLS

Programming Languages and Frameworks: Python, Java, C, C++, HTML, CSS, PHP, JavaScript, Bootstrap

Databases, and Other Tools: MySQL, Docker, Kubernetes, Helm, Git, JIRA, Jenkins, Eclipse, PyCharm, IntelliJ

Operating System: Windows, Linux

EXPERIENCE

Senior Software Developer at Nokia Solutions and Networks India Pvt Ltd,

(Oct 2021 – Jul 2022)

- Developed and orchestrated Massive MIMO support for Nokia & Ericsson vendors as well as 5G features for Coverage and Capacity modules for the optimization of MIMO and 5G networks. Awarded the “Fearless” badge for contribution and leadership towards the 5G support in the Coverage Capacity Optimization module.
- Enhanced Nokia’s 5G Network Slicing by revamping the cloud architecture (C-SON) using Java, Kubernetes, Helm, and Docker.
- Supervised an Agile team of Technical Specialists and Software Developers as a Scrum Master. Mentored trainees interviewed, and assessed freshers for entry-level positions on various topics relevant to the role at Nokia.

Software Developer at Nokia Solutions and Networks India Pvt Ltd,

(Jul 2019 – Sept 2021)

- Boosted the optimization of New-Cell-Detection-Orchestration, Coverage-Capacity-Optimization module by 60% by introducing 4G features using Python.
- Designed and improved 4G algorithms based on polygon creation around user cells to maximize a module’s performance and implemented a Near-Real-Time Mobility Load Balancing module for 3G and 4G cell optimization
- Resolved 75% of technical bugs raised as part of performance issues related to Nokia’s EdenNet modules.

Engineering Intern at Nokia Solutions and Networks India Pvt Ltd.

(Jan 2019 – Jun 2019)

- Implemented PET (Performance Evaluation and Tests) Automation tool using Python, Django, HTML, CSS, and JavaScript to help the system verification team to analyze Nokia’s SON EdenNet modules by scheduling timely runs and easier performance comparisons. Witnessed 35% improvement in the team’s productivity.

Intern at PDA Trade Fairs Pvt Ltd.

(Jan 2018 – Feb 2018)

- Streamlined and established a Telecalling Data software, to validate, categorize data, view interactive and responsive charts of records, and download progress reports. It assisted in tracking an employee’s day-to-day progress.
- The software restructured communication flow between two departments and cut down manual work by 50%.

TECHNICAL PAPERS AND CERTIFICATIONS

- Published “Hand Gesture Recognition using Machine Learning Algorithms”, in International Journal of Recent Technology and Engineering (IJRTE), May 2019.
- Completed ‘Cloud Architecture - Core Concepts’, NokiaEDU LinkedIn Learning, 2021.
- Completed Android App Development and Java Programming, Aptech, June 2018.

PROJECTS

Hand Gesture Recognition using Human-Computer Interaction, BMSIT

(8 months)

This project aims to use mathematical algorithms to recognize human gestures to control a PDF or PPT.

- TensorFlow and OpenCV were used for object detection and the Haar Cascade algorithm to draw a boundary box around the detected object. The PDF was connected with PyAutoGUI to enable zooming in, zooming out, and scrolling.

Student Project Assessment Review Committee Software (SPARC), BMSIT

(4 months)

The project aims to help teachers track students’ advancement on projects.

- It helps students mark and review their progress at the various phases of the projects. Assists in the allocation of mentors for the group based on their field of interest. The final score report along with the comments is available as a PDF.

ACTIVITIES AND AWARDS

- Awarded cash prize by alumni for the department topper of Computer Science and a cash prize for the best project as part of Project-Based Learning, BMSIT 2017.
- Academic tutor - Math and Science for 9th and 10th-grade students, 2016 – 2019.
- Nominated as 'Student of the Year' and received a certificate for consistent distinction, CMR, 2015.
- Received 'Trophy of Excellence, for outstanding performance in academics, 2010-2013.

Pritika Priyadarshini

<https://www.linkedin.com/in/pritika-priyadarshini>

Email : pritika.priyadarshini@utdallas.edu

Mobile : 945-249-2481

EDUCATION

- **University of Texas at Dallas** Richardson, Texas
Master of Science in Computer Science; *August 2022 - May 2024 (Expected)*
 - Relevant Coursework : Design and Analysis of Computer Algorithms, Machine Learning, Object Oriented Analysis and Design
- **Manipal Institute of Technology** Manipal, India
Bachelor of Technology in Computer Science; CGPA: 9.02 / 10 *2016 - 2020*
 - Relevant Coursework : Data Structures, Database Systems, Operating Systems, Compiler Design

EXPERIENCE

- **VMware** Bangalore, India
Member of Technical Staff *July 2020 - July 2022*
 - Engineer for vSphere Solutions, developed automation scripts for the vSphere suite of products and integrated them into a language agnostic testing framework.
 - Developed feature tests and an automated workflow to test licenses across multiple release lines. It verifies that only features supported by a specific product license are functional and covers negative test cases.
 - Built an end-to-end module using Python to test update operations on vCenter server using build catalog. This module covers post-update sanity tests and is key during go-live testing.
 - Developed an automation workflow in Java using REST APIs to validate product migration across environments, verifying that all the configurations were successfully migrated.

INTERNSHIPS

- **VMware** Bangalore, India
Research and Development Intern *Jan 2020 - July 2020*
 - Developed a Python based automation tool to dynamically execute test suites for various upgrade/patch flows.
 - It tracked run status and notified users with results via email. This reduced hours of manual effort and helped in identification of critical issues early in the release cycle.
 - Developed an application to wrap a function within a docker image and scale it on a multi-node docker setup. Implemented REST APIs with role based access control to register and execute docker images.
- **Microsoft** Hyderabad, India
Software Developer Intern *May 2019 - July 2019*
 - Developed a pipeline flow to persist test results of applications running in Docker containers. Used Docker volumes to preserve data generated by running Docker containers.
 - Rendered these test results to Azure DevOps platform user interface using ReactJS.
 - Implemented a clustering algorithm in C# to group related test failures and publish them to Azure DevOps platform.
- **FinMechanics Private Limited** Mumbai, India
Summer Intern *May 2018 - July 2018*
 - Developed scripting features in the structuring module of the treasury pricing application to validate and run custom scripts.
 - Enabled users to define and create custom strategies from a Node JS based user interface.

PROGRAMMING SKILLS

- **Areas of interest:** Backend development, Scalable systems, Machine Learning
- **Programming Languages:** Python, C++, C, Java
- **Frameworks and Tools:** MySQL, HTML, CSS, Javascript, Flask, Shell scripting

Bhanu Prakash Bonthagorla

Dallas, Texas, 75252; 9452469714; b.bhanuprakash4@gmail.com

<https://www.linkedin.com/in/bhanu004/>

SUMMARY

- I have total 6 years of experience in developing the ecommerce application as SAP Hybris Commerce Developer and Android Application Developer
- Good analytical and programming capabilities coupled with excellent decision-making skills.
- Ability to learn and adapt quickly to the emerging new technologies.
- Excellent reputation for finding RCA's and providing the optimal solution.

EDUCATION EXPERIENCE

The University of Texas at Dallas

Master of Science, Computer Science

May 2024

Indian Institute of Information Technology, Allahabad

Bachelor of Technology, Information Technology

June 2016

3.3 GPA

PROFESSIONAL EXPERIENCE

IBM, Hyderabad

Oct 2021 – June 2022

Senior SAP Hybris Commerce Developer

- Worked as Senior SAP Hybris Commerce Developer in IBM.
- Developed the Web Application Portal for Major Canada Insurance Corporation Where users can apply for a driving license, register their vehicles and Buy or Replace their license plates.
- Developed the web application using multiple technologies and frameworks those are Java, Spring Core, Spring MVC, Hybris, HTML, JSP.

Accenture, Hyderabad

July 2019 – Oct 2021

SAP Hybris Commerce Developer

- Worked on B2C Application of American major motorcycle manufacturer headquartered in Milwaukee, Wisconsin.
- Played hybris lead role for launching 2021 bikes and its fitted products.
- Played hybris lead role for launching Ecommerce sites for Canada, Latin America and Mexico.
- Helped clients for smooth product launches of US and European sites on every month.
- Played key role in finding root cause of major critical incidents and repetitive incidents.
- Developed API's that contain Vehicle Information, Product and its Vehicle Fitment, Track Order, Order History, Order Details, Wish-list.
- Fixed issues related to Product Listing Page (PLP), Product Details Page (PDP), Price and Inventory, Ratings, Returns and Refunds.
- Worked on Data Modelling, Impex, Flexible Search, Email Configuration.
- Worked on Hot Folder Integration.
- Worked on Enhancements, Bugs Fixing, Solving Incidents and Tasks.

Accenture, Hyderabad

Dec 2016 – June 2019

Associate SAP Hybris Commerce Developer

- Worked for Major German Consumer and Industrial Brand headquartered in Düsseldorf, Germany.
- Efficient in Writing ImpEx and Flexible Search Query.
- Worked on user groups creation and access rights.
- Automated Monitoring System Performance.

Android Application Developer Intern

- Developed Android Application where users register their bank cards (Debit and Credit Card) to get online offers in e-commerce and in-store offers for dining, shopping, entertainment, travel
- Technologies Used – Java, XML, Android Studio, Volley, GSON

ACADEMIC PROJECT EXPERIENCE

Enabling Dynamic Data and Indirect Mutual Trust for Cloud Computing Storage Systems

July 2015 – Dec 2015

- It allows the owner to outsource sensitive data to a CSP, and perform full block-level dynamic operations on the outsourced data, i.e., insertion, deletion, and append.
- It allows the security of outsourced data by the following operations:
 - It encrypts the outsourced data uploaded by the owner before sharing with the CSP.
 - It decrypts the data when it is downloaded by the authorized users and the owner as well.
- It ensures that authorized users (i.e., those who have the right to access the owner's file) receive the latest information of the outsourced data.
- It enables indirect mutual trust between the owner and the CSP.
- It maintains the operations like registration of users and editing the own profile.

ADDITIONAL INFORMATION

Technical: Git, Postman, Jira, SAP Hybris, Microsoft Excel, Microsoft PowerPoint, Microsoft 365

Languages: Java, Spring Core, Spring MVC, Hybris, JSP, HTML, MySQL

Eligibility: VISA, Eligible to work in the US for internships and full time for up to 36 months

ACHIEVEMENTS

- Awarded Prestigious **Accenture Celebrate Excellence** for creating greater value for client's business.

GOPIKA MANVITHA KARIYAVULA

Richardson, Texas, 75080; +1 9452492363; gmkariyavula@gmail.com, www.linkedin.com/in/k-gopika-manvitha

EDUCATION:

The University of Texas at Dallas-

Masters in computer science

August 2024

KL University, Vijayawada, India-

Bachelor of Technology

June 2022

9.2/10 GPA

TECHNICAL SKILL EXPERIENCE.

- **Languages:** Java, Python, C, JavaScript, HTML and CSS, SQL, MATLAB.
- **Frameworks:** Spring Framework, Apache solr, Selenium.
- **Tools:** Apache maven, Git, Jenkins, Kafka.
- **Databases:** MySQL, SQL.

Global Recognition:

- CodeChef : Rating-1557; HackerEarth : Rating-1258; HackerRank: Sql- 5 star Badge, Python 5 star Badge.

Certifications:

- Coursera: AI, Machine Learning, Deep Learning, Database Management system courses certificates.
- Completed Python (Basic), Problem Solving (Basic) certifications in HackerRank.
- ServiceNow certified system administrator.
- Completed RPA basic level certification.

PROFESSIONAL EXPERIENCE.

AT&T HYDERABAD (Hyderabad, Telangana, India)—**Senior Associate**

January 2022 – June 2022

- Showcased significant job as a **Full stack developer**.
- Worked collaboratively in a team environment.
- Maintained outstanding communication skills and was bound to the company rules.
- Led many project presentations as a lead and worked as developer in ask Andi project

LEADERSHIP EXPERIENCE.

- **Peer Mentoring:** Helped students in subjects which I have acquired knowledge beforehand.
- **Samyak Coordinator:** Done a great job as a student coordinator in college national level technological fest.
- **KL Magazine:** Worked as a lead for college magazine.
- **Vachas Hobby Club:** Took the responsibility as a club head.

ACADEMIC PROJECT EXPERIENCE.

June 2018 – June 2022

- Classification of soil contamination: The aim of this project is to classify different types of soil contamination based on image recognition via deep neural networks (DNNs).
- Travelling-Sales Man-Problem-Using Genetic Algorithm: solving this problem by using the processes observed in natural evolution to solve various optimizations and search problems.
- Students Performance Analysis: The aim is to analyze student's performance based on his/her report.
- Comparative study on Sorting Algorithms: Study, analyze and compare various traits of sorting algorithm.

ADDITIONAL INFORMATION.

Eligibility: Eligible to work in the US for internships and full time.

Interpersonal Skills: Strong communication skills, Administrative skills, Team player, Learning potential, Problem Solving.

Sailesh Sriram

Dallas, TX

Cell Phone: 972-465-0126

Email: Saileshsriram@gmail.com

OBJECTIVE

Looking for Software Engineering New Grad Positions starting from Summer 2023

EDUCATION

The University of Texas at Dallas

GPA: 3.8

M.S in Computer Science Track: Data

Science

Anticipated Graduation: May 2023

Graduated with B.S in Computer Science: December 2021

TECHNICAL SKILLS

Certifications: AWS Machine Learning Certified

Programming Languages: C, C++, Java, Python, Angular, MySQL, Java Spring Boot, Restful Web Services

Technologies: AWS Sagemaker, TensorFlow, S3, EC2, AWS Glue, Redshift, RDS, Amazon Alexa SDK

Methodologies: Scrum, Kanban

Concepts: Data Structures & Algorithms, Object-Oriented Programming, Web-Application Development

WORK EXPERIENCE

Goldman Sachs – Summer Analyst

June – Aug 2022

Software development engineering intern for Goldman Sachs in the Asset Management Division on the Data Engineering Team. Responsible for designing, developing, and testing a web application that will show financial position data to end-users. Worked with distributed teams in London and New York to design the backend APIs and integrate them with the calling UI Application. Created unit-test cases with high code coverage. Deployed the application to QA and production environments. The technology stack consisted of ReactJS, Java Spring Boot, Junit, Gitlab, and other internal frameworks.

TriNet – Software Development Engineer Intern

June-Nov 2020

Software development engineer intern for TriNet (A HR Solutions Provider for small and medium-sized businesses) Terminations Team. Responsible for designing, developing, and testing a web application related to the Terminations Module in the Main Application. The tech stack includes Angular Framework, Java Spring, and Oracle Database. Initially deployed the application for internal users to start testing potential terminations of employees and expanded the application to include other features.

Supreme Golf – Automation Intern

June-Dec 2018

Developed the Amazon Alexa integration application POC for Supreme Golf's primary web application ("Alexa Open Supreme Golf") and integrated it with Supreme Golf APIs. Developed manual and automation test scripts (using Selenium Web Driver and Java) for Supreme Golf's main portal. Worked closely with onshore and offshore developers during application development, testing, and migration to production.

