A N G E L   J A N E   I S A A C

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OBJECTIVE

I am a coder who is a visualization and animation enthusiast. I enjoy building games to express myself and would like to further use my knowledge, whilst improving in the same, to make games that make the users forget the outside world for some, that gives them the "rush", that helps them unwind.

EDUCATION

Master's in Computer science (pursuing)
University Name: Clemson University.
GPA: 4.0

Bachelor's in Computer Engineering (2019)
University Name: University of Mumbai.
Aggregate: 7.94/10

Diploma in Computer Engineering (2016)
College Name: Padmashree Dr. D.Y.Patil Polytechnic.
Diploma Aggregate: 87.44%

PROFESSIONAL/INTERNSHIP EXPERIENCE

Name of Company: Clemson University
Duration: Dec 2020-present
Title: Graduate Research Assistant
Duties: Parttime Graduate Research Assistant at the Environment and Forestry Department at the University. Currently working with them on the Intelligent Rivers Project that is funded by the University. Individually developing an app for the project that will take away the need to record data in the traditional way and hence automate the system using AWS cloud for storage. This app can now capture data readings, collect photos and monitor quality and health of equipments deployed at various sites across Clemson . This data will be further used to incorporate Machine Learning algorithms to automate functionalities. The app is currently a work-in-progress with 85% of the functionality incorporated.

Name of Company: Botonomics Automations LLP
Duration: October 2019 to November 2019
Title: Intern
Duties: Successfully implemented FLASK for creating dummy web apps. This was mainly done to test an alternative for Django and see how the company adjusts to it. Helped figure out the work around the framework and reduced workload by 60% using the technology. In addition, learned to create a chatbot in JavaScript that can be embedded into any website and successfully implemented the same.

Name of Company: ScrapeNext Technologies
Duration: From Nov 2018- Oct 2019
Title: Intern
Duties: Was trained to implement python in Django framework, based of, of which, successfully wrote backend code and generated layout of multiple websites throughout the period. My main job here was Python programming and implementing it for web application features.

Name of Company: Jawaharlal Nehru Port Trust
Duration: Summer 2018 internship
Title: Intern
Duties: Continued work on the organization's exiting project: Society Management System that was built to manage a large database. Successfully learnt and implemented generation of reports and forms using Oracle Report Builder and Form builder tools for database management.

Name of Company: Esquare Infotech
Duration: Winter 2017 internship
Title: Intern
Duties: Successfully added new functionalities and improved appearance and ease of use for new version release of an existing app called AllPanditji that connects people who want a priest to conduct holy ritual. Mainly worked on improving the GUI, connected GUI elements to the backend code, also learnt and implemented API connection for incorporating new functionalities of location tracking and identity verification.

PROJECTS

Title: Karate Kid game (Clemson University –)   (A work in progress, that will be completed before the 1st week of December)
Details: The game is a 2D side scroller fighting game, which is divided into 8 levels to show 8 colored belts. The player character grows in capabilities as he progresses through the game while overcoming multiple hurdles and fighting with AI enemies. The game engine is designed using SDL2 in C++.

Title: Octopus play animation (Clemson University - 2021)
Details: Developed a 2D game engine for an Octopus creature that moves through a side-scroller environment kicking balls on its way to finally get a coin at the end of the level. I designed and drew the player character and the environment tileset. and implemented the engine using SDL2 in C++.

Title: Color changing HEX (Clemson University - 2021)
Details: Developed a Color changing hex object in Unity using C# that represented a real life hardware that is used to educate the masses on the issue of Female Feticide. This Unity based Hex object hovered over a map of the world based on the directions the user gave using key presses. This hex object also changed colors (red, orange, yellow). Each color represented a range of rate. Further, to refine the range of the rates, the hex object's color saturation would change. Hence, depending on the intensity of the particular color the user could not only map it to the 3 groups but also figure out how high or low the country lies based on the intensity of the color.

Title: Data Analysis using Machine learning Algorithm (Clemson University - 2021)
Details: Analyzed 2 varied datasets (Crime Rate and Zoology datasets), as a part of coursework to better understand application of Machine Learning using R. Successfully concluded that:
- Crime Rates in the city of Chicago were not affected by the rise of Corona Virus numbers.
- Animals can be categories based on external features. (wings, fur, fins etc.)

DEGREE FINAL YEAR PROJECT (Mumbai University - 2019):
Title: GET THE RECIPE!
Details: A project that used concepts of ML to build an android app using Android studio. This app suggests recipes based on the ingredients that user provides through text or photo image.
Duties: Implemented the code in Java, incorporated APIs for recipe database and image recognition.

DIPLOMA FINAL YEAR PROJECT (Dr.D.Y.Patil Polytechnic - 2016):
Title: Centre of Gravity (CG) and Moment of Inertia (MI) Calculator
Details: Successfully built the project using Visual Basics 6.This application makes calculations of MI and CG of various cross sections easy and precise, which otherwise are prone to human error.
Duties: Implemented backend code of formulas, tested working

MINOR PROJECTS *that were implemented successfully and done individually to better understand features and functionalities of different programming environments, frameworks, libraries, tools, and languages:*

I. **Title:** AI ChatBot (2020)
    Details: Successfully built an AI based Chatbot Application using python. The ChatBot is trained to be used in a Bank environment. A user can interact with the ChatBot and get basic information or ask FAQs about the bank for which the trained and tested Chatbot responds accurately.
     Duties: Implemented the code and trained the ChatBot.

II. **Title:** Budget Manager (2020)
Details: Built an Android application that helps users to set a target budget and manage their monthly expenditures. It is built using Android Studio and helps in keeping a tab of spent and remaining amount from the total budget. It also provides features like built-in common categories of expenditures to manage related expenses, graphs of amount spent so that the user can systematically sort out their monthly budget.
Duties: Java code implementation on Android Studio and design of GUI elements.

III. **Title:** BrainStorm (2019)
Details: Brainstorm is an online Quiz website for students to check their knowledge in various subjects at 6 different levels. Developed using Html, PHP, JavaScript, CSS, MySQL in Xampp.
Duties: Implemented backend code using Html, PHP, JavaScript, and some CSS.

IV. **Title:** Take Those Pills (2018)
Details: An Alarm Reminder for Taking medicines and refilling empties, built using Android Studio. The app also provides other features that connects it to online medical stores, doctor chat, and ambulance service along with a separate section to upload scanned records so that all things medical are sorted in one app on the user's phone.
Duties: Java code implementation on Android Studio and design of GUI elements.

V. **Title:** Orange Basket (2017)
Details: Orang Basket is online Grocery Shopping website created using Html, PHP, JavaScript, CSS, MySQL in Xampp.
Duties: Implemented backend code using Html, PHP, JavaScript, and some CSS.

VI. **Title:** Library Management System (2015)
Details: System built in java that tracks the books available and dues of the library members.
Duties: coding the section of managing the books when a request is made to rent a book

COMPUTER SKILLS

- Operating System: Windows, Linux, Unix, MAC
- Languages : C, C++, C#, Java, Python, HTML, CSS, XML, JS, PHP, R.
- For game development : Unity, SDL2.
- Cloud : AWS
- Database: SQL, MySQL.
- FRAMEWORK: Android Studio, Django, Flask, Ionic, Xamarin,
- SOFTWARE TOOLS: Oracle Report Builder, Oracle Form Builder, XAMP

CO-CURRICULAR ACTIVITIES

- Coursera course on Cloud Computing (2020)
- Course on SAP (Jan 2016)
- Won 1st in technical quiz (inter college competition 2016)
- Course on Android Studio (2017)
- Participated in a coding competition at TSEC (2017)
- Attended Intel workshop on ML conducted by Intel (2018)
- Tutored in the following subjects: C, JAVA, Automata Theory /Theoretical Computer science(2016-2018)
- Conducted session on building Website using Html, CSS, PHP, JavaScript using Xampp (2019)
- Course on Basics of Cloud Computing (2020)

EXTRA CURRICULAR ACTIVITIES

Sports:
Practiced Shotokan Karate for 5 (state level gold medalist -2010). At present, practicing kick boxing since 2017.
Volunteered for National Social Service (2017-2018):
Rallied to save the rivers in Maharashtra under NSS (2018). Additionally, volunteered at Tree Plantation drive (2018)
Community service Director at Rotaract Club of Navi Mumbai, Hillside (2019-2020):
Chaired a blood donation drive (July 2019), umbrella donation drive (August 2019), a drive that collected recyclable waste (September2019), a drive that collected funds to provide a month's ration for families in need (September 2019), a drive that celebrated Diwali by distributing packets of homemade sweets to homeless people (September 2019).