Raghu Mina

raghumina11@gmail.com | raghumina.github.io

Education

University of California, Santa Cruz

Master of Science. Serious Games

September 2021 - April 2022

• Relevant Coursework: Game Design Systems, Game Development I (Processing.py), Foundation of Serious Games, Game Development II (Unity, C#).

Jaipur National University, India

Master of Science. Bioinformatics

August 2019 - June 2021

 Relevant Coursework: Data Structures and Algorithms, Java Programming, Python Programming, Computational Biology, Computer Aided Drug Designing, Basic Mathematics and Statastics, Genomics and Proteomics, Molecular Biology and Genetic Engineering.

Bachelor of Science. Bioinformatics

August 2016 - May 2019

• Relevant Coursework: Database Management System, C++, and DSA, Computational Biology, Phylogenetics and Molecular Evolution, Industry Relations and Enterprenurship.

Experience

Gamaa Soft Solutions, Jaipur India

Software Developer

November 2022 - Present

Assisting in designing and developing an Application for iOS and Android

Tools and Technology: Flutter, Dart, HTML, CSS, JavaScript, Angular, Figma, Wireframing

Indian Agricultural Statistics Research Institute, New Delhi

Research Internship

April 2021 - August 2021

- Created a database of biological data of plant-fungal disease *Fusarium wilt* in *Triticum* plants using Python and Biopython to study transcriptomes to find gene expression that causes this fungal disease.
- Tools and Technology: Python, R, NCBI, FASTA, DAVID, Blast2Go, WEGO, GEO2R, MS Excel

Skills

Technical Skills: Python, C++, C#, Java, JavaScript, Angular, Angular Material, Dart, Flutter, Processing.py, HTML, CSS, SQL, Linux, macOS, Git, GitHub, BioPython, R, PERL

Tools/Software: Unity, Figma, Canva, Visual Studio Code, Adobe Photoshop, Processing, MySQL, PiskelApp

Other: Game Development, UI Development, Prototyping, Web Development, Gene Analysis, Molecular Modelling

Academic Projects

<u>Sleep Hygiene</u>: As part of a larger project with collaboration among multiple organizations to assist patients with mild cognitive impairment or Alzheimer's disease, I prototyped, designed and developed Smartphone and mobile apps to track, monitor and remind the patient about the daily activities around their Sleep schedule. It's a sponsored project for the Serious Games foundation class.

• Tools and Technologies: C#, Unity, Figma, Adobe Photoshop, Git, Github, Visual Studio Code

<u>Skate ANTics</u>: Designed user interface, created story narrative, and developed audio effects for a group assignment using Unity 3D game engine. The player controls an ant in a colony, and has to compete and win in the skate competition to save the clan's reputation.

Tools and Technologies: C#, Unity, Audacity, Visual Studio Code, Github, Pixilart

<u>NinjaSmasher:</u> Developed a game using Unity 3D as a part of an academic group assignment for the Game Design System class. Fabricated the audio effects and debugged code, resolved the gameplay and the mechanics problems.

Technology and Tool: C#, Unity, Visual Studio Code, Audacity

<u>Tile Map Creator</u>: Designed and created Tile Map editor for 2D games in Processing py. Players can place, select, edit, rotate, move, delete, and layer them on a grid to generate a custom tile map format based on JSON to save, load and screenshot the entire map.

• Technology and Tool: Processing.py, Python

<u>Soundboard with audio visualizer:</u> Programmed a soundbar with an audio visualizer on processing.py as part of an academic project to analyze sound frequencies and create linear waves on canvas.

Technology and Tool: Processing.py Python, Sound and Minim Library

<u>Space Shooter</u>: Developed a space shooter game where the player shoots the procedurally generated targets using mouse as input.

Technology and Tool: Processing.py, Audacity, Sound Library

<u>Finish the Story</u>: Prototyped a multiplayer board game where players collaborate to complete a story by voting mechanics.

• Skills: Paper Prototyping, Presentation.

<u>Sanity Insanity</u>: Worked on the design of the cards and board for a paper prototype where players compete to collect most points while promoting positive attitude, mental health awareness among the group as part of the Serious Game Foundation I class.

• Technology and Tool: TableTopia, GIMP, Adobe Photoshop

Other

- Participated in a summer research workshop conducted by Jaipur National University and researched on Computational Drug Designing and Structure Prediction, Molecular Biology and Molecular Modelling.
- Actively contributed to various academic and cultural clubs and volunteered at Techonrazz, a cultural festival at Jaipur National University, for 2016 - 2019

Leadership

- Led Department of Life Sciences Volleyball Team to final in Inter University Volleyball competition at Jaipur National University

 September - 2018
- Secured 2nd position in Inter University fashion show at Jaipur National University

 University Volleyball competitions as part of the Jaipur National University Volleyball and Futsal team. October - 2019 2016 - 2019

Volunteering

Forest and Wildlife Conversation: Forest Department of Rajasthan, Jaipur, India

December - 2019

 Volunteered for the Forest Department, where I learned about forest and wildlife management and conservation. Planted trees in the forest to maintain diversity and native species in areas affected by deforestation and aridness.