NIRANJAN GIRHE

🔗 girhe.com   ⭘ github.com/niranjangirhe

✉ niranjangirheindia@gmail.com

📞 +91-7768989938

scholar.google.com/citations?user=ymhd_EQAAAAJ

EDUCATION

4th Year Bachelor of Technology Computer Engineering

MIT Academy of Engineering, Pune, India

📅 August 2019 – Ongoing

- CGPA: 9.74 out of 10. (92.53%)
- JEE mains percentile: 94.55%

RESEARCH INTERNSHIP

Game research and development in Serious Games

Ontario Tech University, Canada (Mitacs GRI)

📅 May 2022 - Aug 2022   Adv: Jeremy Bradbury

- **Task:** To design and implement serious games. (Threaded Paws and Robo-Bugs)
- **Description:** Developed serious game that can help students grasp many concurrency concepts and pitfalls of concurrency, like deadlocks data-race and many more. This block-based game with simulated outcomes was created using the Unity game engine. With intuitive form-based level designing and truly scalable game support code.

`Unity` `Krita` `C#` `Audacity` `GitHub` `2D Animation`

INTERNSHIP

Web-based Elective Allocation System

MIT Academy of Engineering

📅 June 2021 - August 2021   Adv: Mrs. Ranjana Badre

- **Problem Statement:** Migrated inefficient manual elective allocation to an automated system on a web-based platform.
- **Solution:** Centralized automated process set up on a web portal for elective allocation on the basis of match between user preference and respective availability with CGPA-led prioritizing.
- **Application:** This portal is being used by our Institute for Minor subject allocation.

`HTML` `Javascript` `Firebase` `Firestore database` `CSS`

Game Development

Salvation Games

📅 June 2020 - August 2020   Adv. Mr. Harshit Solanki

- **Task:** To Develop a Hyper casual Android game
- Developed an android game using C# on unity. Designed character movement mechanics and physics. Also including variable speedrunning, variable height jump, jet physic, and in-game shop.

`Unity` `Blender` `Krita` `C#` `Audacity` `Ragdoll`

PUBLICATIONS

👥 **Conference Proceedings**

- Girhe, Niranjan et al. (2023). "Shetkari Mitra App—An Application to Maximize the Profit of Farmers". In: *Advances in Communication, Devices and Networking*. Ed. by S Dhar et al. Singapore: Springer Nature Singapore, pp. 111–127. ISBN: 978-981-19-2004-2.
  https://link.springer.com/chapter/10.1007/978-981-19-2004-2_10

CERTIFICATIONS

- ❇ **AWS Certified Cloud Practitioner**
- ❇ **Microsoft Azure AI fundamental (AI 900)**
- ❇ **Microsoft Azure fundamental (AZ 900)**

SKILLS

`Unity` `C++` `C#` `Android Studio` `Java` `Kotlin` `Python`
`AIML` `HTML` `Javascript` `Git & GitHub` `Unreal` `MySQL`
`MongoDB` `Adobe XD` `Blender` `3D Animation` `NodeJS`

ACHIEVEMENTS

🏆 **Winner - Smart India Hackathon**
- Developed web-portal for labour complaint filing and handling.
- Awarded with prize money of **100,000 INR**

🏆 **Winner - UNESCO-India-Africa (UIA) Hackathon 2022**
- Soil health report generation in Android app based on image processing and deep learning.
- Awarded with **300,000 INR** cash prize by the **Vice President and the Education Minister of India.**

🏆 **1st rank in HakkerRank Python Challenge**
- Solved 6 competitive programming questions the fastest
- Awarded with **3,000 INR**.

RESEARCH PROJECTS

Smart Traffic System to optimize the city traffic

MIT Academy of engineering

📅 Jul 2021 – Ongoing   Adv: Dr. Avinash Bhute

- Devised a mathematical formula to compute Optimal estimation of green light interval based on traffic flow rate obtained via sensors; Simulated in Unity.

`Unity` `C#` `Python` `Git` `Firestore database` `IoT`

Shetkari Mitra - Mobile app for farmers

MIT Academy of engineering

📅 Aug 2020 – Mar 2021   Adv: Dr. Avinash Bhute

- Built user-friendly platform for connecting farmers and agricultural experts on a forum; Several data-based features to assist farmers
- The research was presented in ICCDN-2021 conference in SMIT, Sikkim. Pulication details mentioned below.

`Android studio` `Firebase` `API` `Git` `JSON Parsing`
`Picasso` `Firestore database` `Web view` `JSON`

PERSONAL PROJECTS

NGAnime

Android Application

📅 June 2021 – August 2021

- Developed an android application which compiles online Anime streaming platforms at one place. Implemented advance features like sharing anime's using deep linking, export and import data like watch later and anime tracking.

`Android studio` `Java` `JSON` `Git` `Google Analytic`

Killing Tech - Indie Game development and 3D Animation

Unity and Blender 3D Animation

📅 August 2020

- Developed 3D FPS multiplayer Game with low poly graphics using unity and blender. Used Photon 2 engine for networking.
- Experienced in Rigid body, fluid, cloth, particle and fire simulations and animation in Blender open source software.

`Unity` `Blender` `Rigid body Sim` `C#` `Audacity`

Split It - split group expenses

Web Development

📅 January 2022

- Developed a web app to split common expenses within friends

`Firebase` `HTML` `CSS` `Javascript`