Abhigyan Gandhi

LinkedIn | Portfolio Possible Possible

EDUCATION

UNIVERSITY OF LEEDS

MSc. High-Performance Graphics and Games Engineering
September 2025 | Leeds, UK

BITS PILANI DUBAI CAMPUS

B.E. (Hons.), Computer Science

Minor: Data Science

September 2022 | Dubai, UAE CGPA: 8.72 (First Division)

SKILLS

C++ ● C# ● HP GPU Programming ● Python ●
MATLAB ● JavaScript ● OpenGL ● Vulkan ●
GLSL ● HLSL ● Unity ● Unreal Engine ●
Physics Simulation ● Game Engine
Architecture ● HTML ● NodeJS ● MySQL ●
Git ● Linux ● Scikit-Learn ● Pandas ●
TensorFlow ● PyTorch ● Computer Vision ●
CNN Models ● Prediction Models

EXPERIENCE

Stella Stays | Software Engineering AI/ML Intern

Aug 2021 - Jan 2022 | Dubai, UAE Worked with the tech team on multiple machine learning projects: Predictive pricing model, sentiment analysis of hotel reviews, dynamic room allocation algorithm.

Sentient Labs | Student Intern

Jun 2020 - Aug 2020 | Dubai, UAE Collaborated with the team to develop a 2D game for the company's website using Unity.

COURSEWORK

- Complete game engine development from scratch and a game using the game engine (group project), my main work was to handle physics for the engine and audio integration. Implemented our own ECS system using C++ and Vulkan for rendering. Won the Game Republic Red Kite Games Game Technology Award at the <u>Student</u> Showcase 2025
- Implementing mathematics through OpenGL and C++ to draw Bezier Curves and Patches.
- CPU-based ray tracing using OpenGL and GPU-based rasterization with VULKAN.
- Animation cycles for a character and physics for a set of bouncing dodecahedra with collision detection using OpenGL and C++.
- MSc final project: Implementation of a ray tracing denoiser in NVIDIA NRD's sample app to compare it with their own denoisers REBLUR and RELAX. (Ongoing)

PROJECTS

- Developing my own game LETTER SHIFT, a daily puzzle game for mobile and web - Unity 2D, C#. (Ongoing)
- B.E. final project: Mobile Robot Path Planning
 Using Deep Learning Techniques Robotics, Deep
 Learning, Neural networks.
- Analysis and Development of an Algorithm for Generating a Board for Catan - DAA.
- Generating art like Claude Monet using Generative Adversarial Networks - GANs.
- Discord bot using discord.js Node.js module.
- Classification of the Iris dataset ML Classification algorithms.

CERTIFICATIONS

- Unity Certified Associate Game Developer UI and 2D Games
- Foundations of Business Intelligence Google
- Data Engineering Essentials using SQL, Python and PySpark
- Microsoft Azure Machine Learning