Archit Kumar

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EDUCATION

Yale University

New Haven, CT

Simultaneous B.S. + M.S. Computer Science, 4.0/4.0 GPA

Aug. 2022 - May 2026

• Relevant Coursework: Systems Programming, Game Engine Programming, Algorithms, Data Structures, Artificial Intelligence, Object-Oriented Programming, Data Analysis, Human-Computer Interaction, Blockchains & Cryptocurrencies, Linear Algebra, Multivariable Calculus, Language and Computation

EXPERIENCE

Yale Efficient Computing Lab

Jun. 2024 - Sep. 2024

Research Intern under Prof. Lin Zhong

New Haven, Connecticut

* Wrote C++ code to integrate the ParaMax network performance algorithm into Agora, a novel software-based system for handling massive multiple-input multiple-output (MIMO) in 5G networks

Minnapad

May 2024 - Jul. 2024

Generative AI Engineering Intern

Tokyo, Japan

- * Leveraged Stable Diffusion and LoRA to produce consistent AI characters for video games and comics
- * Clients included Keiji Inafune (artist for Mega Man series) and Seiichi Ishii (designer for Tekken series)

Wildchain (Nonprofit Game Studio)

Jun. 2021 – Sep. 2021

Software & Animation Intern

Bangkok, Thailand

- * Designed and implemented over 50 animations for in-game flora and fauna
- * Leveraged C# to program intricate triggers for each animation, enabling seamless integration within gameplay
- * Collaborated directly with the project manager during daily planning meetings, actively contributing to the identification of critical priorities for the game's beta release

People for the Ethical Treatment of Animals (PETA)

Jun. 2020 - Sep. 2020

Web Game Developer

New York. New York

- * Independently conceived, designed, and developed the Unity/C# web game "Monkey Fright" to promote awareness about monkey cruelty in government health laboratories
- * Strategically collaborated with PETA's Vice President of Marketing to align the project with the organization's goals and to amplify its presence on social media

PROJECTS

Skater Gator | Unity, C#, Adobe Photoshop, Autodesk Sketchbook, Xcode

Dec. 2019 – Present

- * Sole contributor in conceiving and designing an iOS mobile game, which has achieved over 3600 downloads from 118 different countries
- * Oversaw end-to-end development encompassing programming, art, animation, music, release, and marketing

Cortex Crusader Game Engine | Dlang, SDL

Nov. 2024 - Dec. 2024

- * Engineered a custom game engine with both 2D and 2.5D (Mode 7) capabilities
- * Implemented the engine's GUI, save/load functionality, and game object editor

Toon Landing | HTML, CSS, JavaScript

Dec. 2019 – Present

- * Launched a quality-oriented game/entertainment studio to showcase original cartoon worlds and characters
- * Independently crafted the company website, employing HTML, CSS, JavaScript, and 70+ original illustrations

Terrainer | Unity, C#, Mapbox SDK

Jan. 2022 - Mar. 2022

- * Led a team of four in building an experimental 3D Unity game incorporating real world satellite data
- * Leveraged Avatar Maker for Unity to create and animate a player character modeled after myself

TECHNICAL SKILLS

Languages: Python, C/C++, C#, Rust, Java, Dlang, R, HTML/CSS, JavaScript, SQL, Racket, Solidity Developer Tools: Unity Game Engine, Godot Engine, XCode, VS Code, R Studio, Git, GitHub, LaTeX