Avinav Priyadarshi

9106797847 | avinavpriyadarshi@gmail.com | linkedin/avinav-priyadarshi2401 | github.com/avinav2401

Education

SRM University KTR	Chennai
B.Tech in Computer Science Engineering	*2028*
Amicus International School	Gujarat
class 12th, CBSE	*2024*

Personal Projects

Luxe E-Commerce Platform | *Live Demo* | *Github link* — December 2025
- Architected a multi-vendor marketplace using **Next.js 15** and **TypeScript**, supporting 3 user roles with secure **NextAuth.js** and a Seller Dashboard optimized by **Cloudinary** to reduce latency by **40%**.
- Integrated **Razorpay** and **Stripe** payments with a visual order tracking timeline, achieving a **99%** Lighthouse performance score through a responsive **Tailwind CSS 4** interface.

System Service Host - Privacy Browser | *Github link* — November 2025
- Engineered a stealth-focused browser using **.NET 9.0** and low-level **Windows User32 APIs**, leveraging **WDA_EXCLUDEFROMCAPTURE** to bypass screen recording detection.
- Created a "Camo Mode" using **runtime JavaScript injection** and a background **Process Radar** algorithm to monitor system threads and manage window visibility.

3D Interactive Portfolio | *Live Demo* | *Github link* — November 2025
- Built an immersive 3D web experience using **React**, **TypeScript**, and **Three.js**, harnessing **Vite** for optimized production assets and high-performance rendering.
- Enforced strict **ESLint** type-aware linting and deployed on **Vercel**, ensuring code scalability and smooth animations across devices.

Trigger Tracker - 2D Space Shooter | *Live Demo* | *Github link* — October 2025
- Constructed a 2D game engine using **Java Swing** and custom **Multithreading**, establishing a game loop that maintains **60 FPS** alongside **real-time SQLite** data persistence.
- Applied **Factory** and **Singleton** design patterns to manage **algorithmic** enemy spawning and collision detection, creating a robust in-game economy and leaderboard system.

Fish Rescue - Ocean Conservation Game | *Live Demo* | *Github link* — August 2024
- Developed an immersive endless runner using **Unity Engine** and **C#**, scripting a **procedural generation algorithm** for infinite background scrolling and **randomized** obstacle spawning.
- Integrated **Object Pooling** patterns to optimize memory allocation, maintaining a stable **60 FPS** on WebGL builds while employing Unity's **2D Pixel Perfect** package.

Technical Skills and Interests

Languages: Java, C++, C#, TypeScript, JavaScript, Python, SQL, C, HTML/CSS
Web Technologies: Next.js, React.js, Node.js, Express.js, Three.js, Tailwind CSS, Zustand, NextAuth.js
Game & Systems: Unity Engine, .NET 9.0, Java Swing, Windows User32 API, Multithreading, WebGL
Databases & Tools: MongoDB, SQLite, Mongoose, Git, GitHub, Vercel, Vite, Cloudinary, Postman
Areas of Interest: Game Development, Full Stack Architecture, System Programming, High-Performance Computing

Certifications & Achievements

Unity Junior Programmer | *Unity Technologies* | Verify Credential — Issued 2025
- Earned industry-recognized certification validating proficiency in **C# scripting**, game physics, API integration, and performance optimization within the Unity Editor.

IBM Cloud Essentials | *IBM* | Verify Credential — Issued 2025
- Validated foundational knowledge of Cloud Computing service models (**IaaS, PaaS, SaaS**) and deployment strategies for enterprise-grade applications.

NPTEL Online Certification - Programming In Java | *IIT Kharagpur* | Verify Credential — Issued Oct 2025
- Achieved **Elite** certification status (Score: **65%**) in a rigorous 12-week curriculum, demonstrating mastery of **OOP**, Multithreading, and Exception Handling.